

THE CONTRADICTIONS OF SOCIALIST ECONOMIES: A MARXIST INTERPRETATION

Domenico Mario Nuti

1. *Premise*

Public ownership of the means of production (in its forms of state, co-operative and local ownership) and macro-economic planning are the fundamental features of socialist economies of **Marxist-Leninist** inspiration. The known variants of this type of economy **differ mainly** in the extent and mix of public ownership, the degree of central control and its extension beyond the macro-economic sphere, the actual techniques of management and planning. These economies differ from both 'associationist' (or 'self-management') socialism of Yugoslavian type where there is no planning, and social democracy of Scandinavian type where private ownership and enterprise continue to dominate.

The large body of economic literature on socialist economies is devoted almost entirely to the practicability and efficiency of resource allocation in various models of socialism with different degrees of centralization, to the development of planning techniques for the co-ordination of economic life and a discussion of their merits relatively to the automatism of markets, and to an analysis of the economic implications of alternative decisional rules and incentive schemes in the management of public ownership. Thus the socialist economy has been investigated primarily as a kind of *capitalism without capitalists*. This is true even of **Marxian** economists such as Oskar Lange and Maurice Dobb, whose theoretical contributions — important as they are — are confined to these areas of inquiry, mostly in response to the challenge of bourgeois economists such as Hayek and Mises.¹ Paradoxically, with very few notable exceptions, the **Marxian** approach to modes of production has been seldom applied to socialist economies of Marxist-Leninist inspiration, and the development of a political economy of socialism has been delayed, slow and fragmentary. This paper is intended as a contribution to this underdeveloped area of **Marxian** economics.

2. *Marxian Method and Socialist Economies*

Marxian political economy, based on dialectical materialism, seeks the laws regulating the emergence, development and transformation of an economic system in the existence of 'contradictions' in the system and in the adaptation process generated by the resolution of those contradictions. Man's activities of production and accumulation modify nature leading to the development of *productive forces* (which stand for the endowment of natural and man-made resources and the state of technical knowledge); this development eventually leads to the emergence of contradictions between the productive potential of society and the prevailing *productive relations* (i.e., the rules about ownership, the organization of labour in production, the distribution, consumption and accumulation of the social product). Productive forces and productive relations define a *mode of production* (such as slavery, feudalism, capitalism, socialism, communism; 'economic system' is an imperfect synonym because it lacks the primacy attributed by Marx to production in economic life, and the reference to the state of productive forces). Productive relations, which are the *economic basis* of any social formation, are modified by the resolution of these contradictions. This, in turn, generates further contradictions between the economic basis and the *superstructure* of society, i.e., those social relations other than production relations as well as the expressions of social consciousness which are indispensable to the very existence of a given mode of production. The interaction between productive forces, productive relations (the economic basis) and superstructure, which is best seen as a simultaneous process rather than one of direct and sequential causation, determines the *laws of motion* of any society.³

'Contradiction' in this context is best understood as incompatibility increasing over time, as disequilibrium, or unstable equilibrium, of economic magnitudes and institutions, which brings about a process of adaptation and change towards a better correspondence of productive forces, productive relations and superstructure?

This deceptively simple and powerful apparatus has been used extensively and fruitfully by Marx and other political economists for the analysis of the capitalist mode of production and of pre-capitalistic economic formations. Its application has led to important insights into the hidden exploitative nature of capitalism, the role of competition and the process of industrial and financial concentration, the problem of effective demand (Rosa Luxemburg,

Kalecki), the political cycle (Kalecki), the role of class conflict in economic growth (Goodwin) and in the explanation of inflation (Rowthorn), the analysis of imperialism (from Lenin to **Baran-Sweezy**). The same cannot be said for the analysis of the socialist mode of production. It is true that many economic historians—deliberately or involuntarily, and whether or not they would accept the **Marxian** label—have taken into account some of the questions raised by the **Marxian** approach in their study of Soviet economic history, emphasizing for instance the low initial level of development of the Soviet economy, or the connection between Soviet accumulation policy and the development of institutions in the inter-war period. But political economists have only rarely applied the **Marxian** method to the socialist economy; indeed many have denied its applicability to the socialist economy altogether.

Bukharin and Rosa Luxemburg, for instance, believed that the end of capitalism would mark the end of political economy as a science; with 'the transition to a planned mode of production consciously organized by the entire working force of society' no longer would there be a science of the laws of development of the economy (Luxemburg, 1954), but presumably only a body of planning techniques of a kind described by Lange as '**praxeology**' (Lange, 1959; this, as the science of human rational choice, is simply part of mainstream economics).

Soviet and, later, East-European official texts have more explicitly claimed the correspondence of production relations and productive forces under socialism, i.e., the end of conflicts and dialectical contradictions. New economic laws are claimed to emerge under socialism, such as the 'law of the increasingly complete satisfaction of the growing material and cultural requirements of the people through the continuous development and perfection of social production', the 'law of planned proportionate development'; these vague propositions are simply a wishful restatement of the fact that the socialist economy is planned. The 'law of value', in the sense of market discipline, is recognized as operating at least in the sphere of consumption goods; this simply acknowledges that central planning is not all-embracing. The most significant statement in the official texts is the so-called 'law of the faster growth of the production of the means of production relatively to the production of means of consumption'; this is an accurate statement of the accumulation policies actually followed in the Soviet Union and Eastern Europe to date—with sporadic and short-lived exceptions—but the policy has no necessary foundation outside the case of a closed economy

which is either trying to accelerate its growth or/and is facing a rising capital intensity of production. To regard this as a law of socialism is simply an attempt to legitimize the accumulation policy actually pursued.' These pseudo-laws clearly have nothing to do with the **Marxian** 'laws of motion' of society. They are just part of the official ideology, i.e., are a component of the socialist 'superstructure'.

In East-European literature in the sixties a rather crude version of the **Marxian** approach was put forward, to explain the proposed and partly implemented reform of the Soviet-type centralized model prevailing in the area. Measures of decentralization, it was argued, were made necessary by the transition from *extensive* economic development with abundant labour and natural resources to *intensive* development with scarcity of labour and resources. This theory is in line with Soviet-type orthodox political economy of socialism, in that a discrepancy between the level of development of productive forces and the prevailing productive relations is regarded as soluble without conflicts, antagonisms or dialectical oppositions. As we shall see later on in this paper (section 6) the transition was important, but in *itself* is not an explanation of institutional change and economic performance in Eastern Europe from the mid sixties to date. Nor can the drive for reform be associated with a smooth, conflict-free transition between models: suffice to mention the Poznan events in 1956, the abrupt end of the Hungarian experiment in 1956 and of the Czech experiment in 1968, the Baltic events of 1970, and so on.

The fact that the actual development of socialist countries did not conform to the picture of conflict-free and harmonious societies hopefully expected by early socialist writers and—with much less justification—portrayed by official texts and simple theories of transition, has led a number of critics claiming to work in the **Marxian** tradition to fill this analytical vacuum. These Marx-inspired critics, who do not construct a **Marxian** political economy of socialism, follow three basic lines:

1) An orthodox Trotskyist line (exemplified by **Trotsky**, 1937; Mandel, 1968 Vol. II, 1974) which, broadly speaking, regards the Soviet Union as a 'bureaucratically deformed workers' state' (an expression actually attributed to Lenin) and Soviet-type economies as 'transitional societies' conditioned by the low level of socio-economic development reached at the time of transition between capitalism and socialism, subject to their own 'laws' different from those of either capitalism or socialism, exhibiting a basic contradiction between economic planning and the permanence of commodity

production in the sphere of consumption goods, in other words a contradiction due to the coexistence of market and plan (this contradiction is stated but not analysed in any detail). Soviet society is regarded as ruled by a bureaucracy (i.e., a social layer comprising all those who exercise management and leadership functions in any sector of social life); this is not regarded as a *class*, because it does not appropriate the surplus though it decides its allocation; but there is a conflict between 'the potential optimization of growth and the use of resources deriving from planning and socialization, and the indifference of the new ruling bureaucracy to such optimization' (Mandel, 1974, p. 17). The development of a transitional society into a fully socialist one requires: the growth of productive forces, workers' self-management, political democracy, the withering away of commodity relations, a permanent (cultural) revolution in daily life, and the international development of revolution (Mandel, 1974).

2) The line of International Socialism (exemplified by Cliff, 1964; **Harman**, 1975); it shares with the Trotskyist line the notion of the degenerated revolution and the internationalist imperative, but goes further in its critique of Soviet-type societies by arguing that the bureaucracy is a new *ruling class* with a specific class interest in securing and maintaining a privileged standard of living and also in capital accumulation for the expansion of military power or even for its own sake. Unlike the Trotskyists, this view considers 'control' over the means of production to be as good as 'ownership' for the definition of a class; Soviet-type societies (including Maoist China and North Korea) are defined as 'bureaucratic state-capitalist' societies, consequently requiring an anti-bureaucratic working-class revolution, which can only be successful on an international scale.

3) The Maoist line (exemplified by Bettelheim-Sweezy, 1971, Bettelheim, 1974) has much in common with the previous view in that it regards Soviet-type societies as 'state capitalist', ruled by a 'state bourgeoisie' whose purpose is domination at home and imperialism abroad; but it differs significantly in its more positive assessment of Stalinism, in its positive assessment of the Maoist experience as the proof that the transformation of productive forces is not a precondition for the transformation of social relations; it is more analytical, for instance, it identifies 'economism' as the cardinal error pervading the Soviet experience, and it discusses the difference between nationalization and socialization; it is also characterized by a very critical assessment of the economic reforms which have taken place in Eastern Europe in the mid sixties,

regarded as evidence of the capitalist trend of these state-capitalist societies. The difference between the Maoist and the IS position is not one of nuances; for instance, the IS condemns Soviet intervention on the ground that although Czechoslovakia was at the time taking the capitalist road, the Soviet Union had no business to intervene as it has been taking exactly the same road back to capitalism (See Bettelheim-Sweezy, 1971).

The trouble with these three lines is not so much the tenuous and debatable nature of their connection with Marx—which in itself is not very important—but that *they* are unconvincing and *positively misleading* interpretations of the experience of realized *socialism*. A detailed analysis of these lines is beyond the scope of this paper, but apart from their own mutual inconsistencies there is already a considerable literature which very effectively criticizes *them*.⁵ For instance, it has been stressed that 'control' over the means of production exercised by the bureaucracy does not include self-appropriation of the product nor right of disposal of those means, and that privileged access to consumption is not by itself sufficient to define a class (Lane, 1977, 1978; Lane-O'Dell, 1978; Miliband, 1975); that although the Soviet-type state is *run for* the workers and in their *name* rather than *by* them and is therefore not a classless society, it is not a society with class *conflict* but a one-class society confronting the state (Lane, 1977); that indeed Soviet workers exhibit the features of a class deeply 'incorporated' into the Soviet system (Lane, 1978); that Soviet-type planning has nothing in common with capitalist attempts at macro-economic management because of the capitalist failure to control investment, and that Soviet-type markets differ from capitalist markets not only in scope (not fully extending to production goods) but also in the *sectoral* immobility of Soviet-type enterprises (Nutti, 1978); and so on.⁶ Of course there are fragments of these three approaches which are not only correct but also useful for the construction of a political economy of 'realized' socialism, and indeed will be embodied in my own attempt at presenting a Marxist version of such a political economy. For instance, Mandel's treatment of the historical conditioning and therefore the relativity of the Soviet model; the IS emphasis on the unrestrained accumulation drive of Soviet type economies and the ensuing cyclical patterns; the Maoist distinction between nationalization and socialization of the means of production. But it must be stressed that this is about all that can be rescued from these approaches; that the acceptance of these points does not imply acceptance of any of these approaches, and indeed these same points are made by a number of

people totally unconnected with these approaches; and that ultimately the weakness of these approaches is that while they amount to an indictment of the Soviet-type model and a revolutionary strategy, whatever the merits of their case *they do not provide a theory of the functioning and of the development of these societies.*

The best, most coherent and comprehensive attempt at constructing a **Marxian** political economy of socialism is represented by the work of the Polish economist Włodzimierz Brus (1964, 1973, 1975). Influenced by the Polish experience of the mid fifties, Brus developed a classification of socialist economies depending on the degree of centralization of current production decisions at the level of enterprises and sectors, discussed the relative merits of the centralized and the decentralized model as well as their suitability to different levels of development and to different purposes, and raised the question of Marx-type conflicts within the socialist economy (the emergence of groups, the weakening of incentives, the monopolistic bias due to industrial concentration, the possibility of market disequilibria in the sphere of consumption goods, the deterioration of labour discipline and instability of the labour force, the danger of bureaucratization—these are all phenomena conflicting with the socialization of the means of production and the progressive role of economic planning; Brus 1963, especially Ch. 1). Brus analysed in greater detail some of these conflicts in a collection of essays (1973) discussing among other things the socialization of the means of production as a *process* rather than a single act; the political premises and implications of economic decentralization, in particular the role of institutions of workers' self-government; the impact of central planning on innovation; the political and not purely technical nature of macro-economic decisions, and the technical limits to political choice; the informational advantages of political democracy. He clearly stated that 'Socialism does not put an end to socio-economic contradictions' (Brus, 1973, p. 82) and claimed that 'under socialism, economic and political factors are inseparable' (p. 89). His latest book (1975) brings together all these strands following a declared **Marxian** methodology, broadening the analysis to include Yugoslav self-management, an analysis of the specific East-European conditions which conflicted with the implant of the Stalinist model, and a discussion of the political and economic aspects of recent economic reform in Eastern Europe. He concludes, in spite of misgivings, that 'there exist economic laws determining the necessity of real socialization of the means of production and thus setting the direction for the further evolution of socialism in

relation to the form which it has taken in the USSR and the people's democracies'; this, in turn, means 'the necessity of political democratization' (Brus, 1975, p. 207).

The East-German writer Rudolf Bahro must also be included—at least partially—within the scope of a Marxist attempt at constructing a political economy of socialism (Bahro, 1977, 1978). In fact Bahro sails dangerously close to the Trotskyist-IS positions outlined and criticized above; he also devotes no more than half a page to the recent economic reform (regarded as no more than part of a cat-and-mouse game between two components of the bureaucracy, namely central bureaucrats and managers) and devotes a great deal of space instead to a picture of socialist society which at least for the rest of this century must be regarded as utopian. But he provides very perceptive insights on the connection between the Soviet model of 'despotic industrialization' and of the **Marxian** Asiatic mode of production; the characterization of the 'proto-socialist' Soviet system, implying an embryonic stage of socialism; the connection between state repression and underdevelopment; the implications of the prevailing division of labour and the existence of a 'surplus of human expertise'; the role of the party as a 'double bureaucracy', and the 'insuperable contradiction between the social task of the party and its political and organizational form of existence as a political organization' (Bahro, 1978, p. 246). **Bahro's** class analysis of **Soviet-type** societies leads him to rule out the possibility and indeed the desirability of a pluralistic (i.e., multi-party) political system, but he expects those societies to evolve following a **process** of renewal and democratization of the communist party (Part Three, Ch. 12).

In the belief that the socialist economies of Eastern Europe present **Marxian-type** contradictions and are subject to laws of motion deriving from their attempted resolution a **Marxian** model is developed here of the interaction between capital accumulation, economic decentralization and political liberalization. This model is based on and tries to explain the experience of the Soviet Union and East-European economies in the post-war period, and leads to conditional predictions about their possible development paths. In order to put the model in a historical perspective, and to review and consolidate the elements of a **Marxian** political economy of socialism, the model is preceded by a discussion of the main features of various stages of socialist development (war communism 1918-21; New Economic Policy 1921-8; centralized socialism 1928-65; other East-European economies, and the economic reforms), their preconditions, achievements and problems. The inadequacy of

the cruder 'transition' theory of economic reforms is also discussed.

Naturally, given the broad area reviewed and the limits of the format of this paper, I will have to be selective in the choice of themes and of evidence, and sometimes more assertive than I could wish. The justification is that this is meant as a contribution to political economy, not to economic history; and before I am accused of 'reductionism' or of 'determinism', I wish to stress that I am aware that political and social phenomena have a life of their own quite independently of the underlying economic forces, and that I do not believe in either the exclusiveness or the uniqueness of the impact of economic factors. Nevertheless, I am convinced that many political and economic features of East-European countries (including their least likeable features) are neither the consequences of the personality of leaders nor necessary and immutable characteristics of socialism.

3. *War Communism (1918-21)*

It is widely believed that according to Marxist doctrine the proletariat could seize power and gain control over the means of production only in the most advanced capitalist countries; what Marx actually postulated is that the establishment of socialism would require a level of capitalist development sufficient for the creation of an industrial proletariat, and of some degree of class consciousness and organization; after that the possibility of overthrowing the capitalist system would depend on the development of class struggle; the breakdown of capitalism would therefore occur in the weakest link of the system'. It is worth recalling the 'level of development of productive forces' in Russia at the time of the Bolshevik take-over, characterized by the following features:

1) Despite the progress made in the late nineteenth century, with industrial growth at an average annual rate of 5.8 per cent over the period 1885-1913 and an industrial working class estimated at 2.5 million in 1913 (over three times the size of the industrial working class in 1861-70), Russia was still extremely backward: 80 per cent of its population consisted of illiterate or semi-literate peasants and its industrial large-scale output was only 6.9 per cent of American gross industrial output, and Russian per capita production in 1913 was only 4.8 per cent of American (Lane, 1978).

2) Not only was the industrial sector small, its structure was incapable of sustaining rapid self-supporting development: in 1913 nearly half of total industrial employment was in textiles, with only 15 per cent of industrial employment in the metal industry and 8.8 per cent in mining (Lane, 1978).

3) Agriculture was similarly underdeveloped: in terms of calories produced per male agricultural worker Russia ranked last but one among European countries in 1860 (doing better than Italy) and by 1910 had only succeeded in moving one up the list, overtaking Spain (Nove, 1969).

4) Population was growing fast, and labour was abundant;

5) On the contrary, capital was short, and in 1913 about one-third of the capital of private companies was foreign owned (Nove, 1969).

6) Russia's trade relations were typical of an underdeveloped country dependent on the industrialized West; over half of total Russian exports were accounted for by cereals and other foodstuffs; a third of all imports were made up of manufactured goods and raw materials, and semi-manufactured goods accounted for nearly a half. Trade dependence on the West and especially on German supplies (accounting for half of Russian imports) was such that 'in the First World War Russia continued to import certain commodities from Germany (mainly chemicals, metals and machinery), explicitly exempting these from the general prohibition of trade with enemy countries' (Dobb, 1966, p. 37).

7) The war effort and war destructions, aggravated by transportation difficulties, had led to grave scarcities and deficits of fuel, materials and food.

Pre-revolutionary 'production relations' in Russia were a mixture of capitalist, feudal and pre-feudal elements: the modern capitalist formation (industrial bourgeoisie and wage-labourers) concentrated in a few towns; the feudal formation only partly liquidated since the 1861 emancipation of serfs; the 'Asiatic' formation represented by the Tsarist autocracy, its bureaucracy and the Orthodox state church, and most of the peasantry.

The model of socialism established by Soviet rule in these conditions is that of War Communism. It was characterized by the rapid expansion of State ownership and economic control over economic activity; the 'militarization' of labour; the obligatory delivery and requisition of the agricultural surplus; the organization of the entire economy effectively by centralized barter on a vast scale; the demonetization of the economy, first *de facto* because of hyper-inflation, then *de jure* at least within the state sector; the progressive payment of wage in kind according to a 'class ration'; the abolition of internal private trade; the establishment of consumers' co-operatives with compulsory membership; the provision of an increasing range of services free of charge; the direct allocation of inputs according to a system of priorities (See Carr,

1952, Ch. 17; Dobb, 1966; Szamuely 1974). War communism lasted from early 1918 to the beginning of 1921, when the Xth Congress established the New Economic Policy (NEP), characterized by the restoration of private production and trade, the re-establishment of ordinary monetary flows and the stabilization of the currency, the introduction of the principles of cost accounting and autonomy in state firms.

War Communism has been neglected as a model of 'realized socialism'. It is mostly regarded as a set of emergency measures, similar to wartime mobilization and centralization in capitalist countries—an interpretation encouraged by Soviet official sources suggesting that NEP was what Soviet leaders wanted to establish from the beginning, had they not been prevented by invasion and civil war⁹. On the contrary, László Szamuely points out that, whatever the impact of war necessity on actual choice, War Communism as 'a centralized subsistence economy, managed by instructions, based on egalitarian principles' was the image and operational concept of a socialist economy in the writing of Kautsky, Hilferding; Bukharin, in its most developed form (1920); Preobrazhensky, Strumilin; many of the direct participants in state administration; Trotsky of course, and Lenin himself (Szamuely, 1974); not only before War Communism, but all the time while it was taking shape. It was only after the event, after it became apparent that the system could not survive the economic and political pressures it had generated, that it came to be regarded as a 'deviation from the normal course', 'a temporary measure' which 'was not nor could be a policy that corresponded to the economic tasks of the proletariat' (Lenin).

War Communism came to an end (not without opposition, and recriminations about the 'retreat' this represented) because of economic difficulties (the multiplication of priorities; the disruption of supplies; difficulties with grain procurements, just to name a few) and political pressures (strikes, absenteeism, opposition in the factories, the Kronstadt rebellion, etc.). Basically, War Communism delivered survival, but could not deliver reconstruction, nor (at that time and in that form) industrialization; it was destroyed by its own contradictions. But it remains an important landmark in the development of socialism 1) because it was the first model of realized socialism (though admittedly in far from ideal conditions); 2) because—as we shall see—it provided a guideline for the Stalinist model of another brand of War Communism, the war against

underdevelopment; 3) because it generated some of the economic and political problems of the Stalinist model.

4. *The New Economic Policy (1921-28)*

The first measure of the New Economic Policy was the replacement of compulsory deliveries of agricultural surplus by a tax in kind, leaving peasants free to trade any remainder over and above the tax and their own requirements. This was supposed to save the *smychka*, i.e., the alliance between workers and peasants, and improve food supplies. 'The development launched by the reform in the spring of 1921 soon exceeded the original targets. The emergence of local trade led to the development of a wide internal market; the logic of modern economy rapidly burst the primitive framework of barter and demanded modern money and credit relations. The Soviet State recognized its importance in time and, already in the summer of 1921, it took the first steps to normalize monetary and credit turnover. (One of the most important ones was the creation—as a matter of fact, the reopening—of the State Bank in early October 1921). Also the blood circulation of industry was resumed, state enterprises began to rely on market possibilities in their purchases and product sales'—this is how Szamuely succinctly summarizes the process of transition to the NEP. Denationalizations, *leasings* (often to former owners), freedom to organize small scale private enterprises (not exceeding ten to twenty workers in theory, much greater in practice) followed. The state budget was balanced, the currency was stabilized and made convertible, concessions were granted to foreign capital, foreign trade increased. The economy recovered. (See Dobb, 1966; Nove, 1969; Carr, 1952, 1954, 1958.)

The superstructure rapidly adjusted to this new economic basis. Economic liberalization brought about complete political centralization. Fearing the danger of a capitalist threat to the new order, all political parties other than the Bolsheviks were finally banned and, at the same Xth Congress that introduced NEP, Lenin's proposal that organized groups or faction within the party itself should be banned was approved and immediately acted upon. Deutscher comments that this was not yet strictly a ban on inner-party opposition; dissenters were still encouraged to express dissent in the party newspaper and discussions, and leaders of all shades of opposition were elected to the new CC; but Lenin 'insisted that opposition should remain diffuse and that the dissenters should not form themselves into solid leagues. He submitted a resolution, one

clause of which (kept secret) empowered the Central Committee to expel offenders, no matter how high their standing in the party (Deutscher, 1954, p. 519). 'The arrangement under which opposition was permitted provided it remained dispersed could work as long as members of the party disagree over secondary or transient issues. But when the differences were serious and prolonged it was inevitable that members of the same mind should band together' (Deutscher, *ibidem*).

A further adjustment in the superstructure is a 'theoretical revision' (Szamuely, 1974, Ch. 4). Already in the autumn of 1921 Lenin formulated the three basic principles of management on which the New Economic Policy was founded: 1) personal incentive, 2) economic accounting (*khozraschot*) and 3) the utilization of commodity and money relations in the construction of socialism. At the XIth Congress in March 1922 Lenin 'called competition with private capital on the domestic and the international market "the pivot of the New Economic Policy", "the quintessence of the Party's policy"; he held it to be a "crucial test", "the last and decisive battle" on which the fate of socialism depended' (Szamuely, *ibidem*, pp. 77-8). It appears from Lenin's writings that not only did he accept the idea that state enterprises should conduct a market economy, but even looked at this as a possible way of implementing a central state plan. Szamuely argues that Lenin had arrived, or was on the way to arrive, at the idea of a system of socialist planned economy using methods of market economy and relying on material incentives (Szamuely, 1974, p. 79).

This interpretation of Lenin's vision may 'or may not be correct. The fact is that the mode of production represented by the NEP—basically a mixed economy of a kind which today would certainly obtain the blessing of the IMF—delivered reconstruction, but was unable to do more than that; indeed it soon generated its own contradictions. Let us review the state of development of productive forces and its prospects under NEP in the late twenties:

1) the reconstruction of the economy was completed at some point between 1926 and 1928, according to the yardstick used;

2) growth had been based mostly on the reactivation of existing capacity and the reabsorption of available factory labour; but gross investment in the mid twenties was not greatly in excess of depreciation (Nove, 1969)

3) 'Socialism in one country'—not as the slogan that Trotsky called 'a reactionary, narrow dream', and Sartre 'an ideological

monstrosity' (Sartre, 1977), but as a fact of life, given the failure of European revolutions—precluded any extensive use of foreign capital either in the form of loans or direct investment in order to finance capital accumulation;

4) given the coexistence of a private and a socialized sector, the problem was not only that of obtaining capital accumulation, but also that of generating capital accumulation *within the socialized sector* (Preobrazhensky's 'primitive socialist accumulation'); this could be done in the circumstances either by expropriating the peasants (directly, or manipulating the terms of trade between private agriculture and socialized industry) or the Nepmen, thereby undermining the foundations of NEP, or by compressing the living standards of workers in the socialized sector; alternatively, accumulation would have had to proceed at a slow pace;

5) unemployment arose and fluctuated during the NEP; it reached 1.24 million at the beginning of 1924, fell to 950,000 in the next year, but began rising again to reach a figure of 1.6 million in 1929 (Nove, 1969, p. 115; there **were** only 8.5 million 'workers and employees' in 1924). A slow pace of accumulation would have caused the permanence, if not the increase, of labour unemployment, which presumably would have destroyed any pretence at even a semblance of socialism;

6) profiteering Nepmen were thriving;

7) the tax in kind having been replaced with a money tax, agricultural procurements had to go through the market; the deterioration of agriculture's terms of trade had led to supply difficulties (the 'scissor crisis' of 1925); the same difficulties were arising at the end of the twenties; the contradiction generated by NEP boiled down to the dilemma between *either* the use of price incentives to obtain a higher marketed surplus, which would have led to the further development of a *kulak* class and the abandonment of the idea of using agriculture to finance primitive socialist accumulation; *or* the acceptance of low levels of agricultural production and marketed surplus;

8) finally, 'socialism in one country' also meant limited prospects for international trade; the Soviet Union had already accumulated a considerable amount of short-term international debt, the servicing cost of which was mounting; the amount of traditional agricultural exports available for export was falling in volume; terms of trade were deteriorating (Dohan, 1976).

It should be clear that there was a contradiction between the maintenance of the NEP mixed economy and the simultaneous

achievement of economic growth, growth of the socialized sector, and minimum standards of socialist distribution.

The growing tension between productive forces and productive relations manifested itself, among other things, under the guise of intense discussion around two major themes: the accumulation strategy, and the nature of economic planning (Erich, 1960; Spulber, 1964; Carr-Davies, 1974; Dobb, 1960, 1965). The theoreticians of the right wing, like Shanin, Bazarov and Bukharin, advocated simultaneous agricultural and industrial growth with heavy industry following the development of agriculture and light industry. Shanin, for instance, maintained the necessity of a sequence of development in which priority would be given in turn to agriculture, then to light industry following the demand expansion from the agricultural sector, and then to heavy industry only after the growth of these sectors had brought about a sufficient expansion in the demand for capital goods. The left opposition, represented mainly by Preobrazhensky, maintained instead that the lead in the process of industrialization should be taken by heavy industry and that the demand for capital goods would be generated in the very process of the expansion of heavy industry (see the collection of contemporary contributions in Spulber, 1964; also, Preobrazhensky, 1965). The argument of the left is well presented and formalized by Feldman who developed Marx's schemes of expanded reproduction into a mathematical model of acceleration of growth, analysing the growth and accumulation potential of a closed economy with a small heavy industry and plentiful labour provided priority was given to investment in the machine tool industry (translated in Spulber, 1964; Feldman's model was improved by Domar, 1956).

In the discussion on planning two schools emerged, which soon became to be known respectively as the 'genetic' and the 'teleological' (or purposeful) approaches to economic planning. The genetic school, with Groman, Bazarov, Kondratieff, viewed planning as an extrapolation of past trends, conditioned by many objective constraints including the capacity levels in the pre-war period; they regarded the plan as a forecast, and attached importance to balanced growth. The teleological school, represented for instance by Strumilin, on the contrary stressed the wide extent of the planner's discretion in shaping the future, especially in the long run and at the cost of accumulation; they regarded planning as a deliberate act of change, an act of war even, to change the structure of the economy, and were prepared to accept unbalanced growth in

order to implement such change (Carr-Davies, 1974; Spulber, 1964). Meanwhile in the Soviet economy there were a number of plans, but no overall consolidated macro-economic planning; though there was 'exercise of government control over economic processes', and techniques were being developed for improving the government's grip on the basic proportions in the economy (material and financial balances, control figures, planning procedures, and so on; see Carr-Davies, 1974).

5. *Centralised Socialism in the USSR (1928-1965)*

The contradictions of the NEP and the hesitations about accumulation and planning were resolved by Stalin in the manner that is well known. The 'productive relations', indeed the entire social formation of the NEP, had to give way. The new social formation that took shape in the years 1928-32 was very different; it was characterized by:

1) the establishment of five-year planning as well as shorter operational plans, of great ambition and encompassing the entire economy, for the accelerated industrialization of the country by means of massive capital accumulation. Hunter analyses the 1929 'optimal' version of the first Five Year Plan and by means of input-output analysis shows that it was not feasible, as the growth of gross and net outputs were not mutually consistent; he drafts alternative expansion paths and shows that it would have taken at least eight years to reach the targets of the plan (Hunter, 1973). But then we must remember that sophisticated techniques for the evaluation of plan variants were not yet available; that over-ambitious targets followed from the decision to industrialize fast ('To slacken the pace of industrialization would mean to lag behind and those who lag behind are beaten. We do not want to be beaten. No, we do not want to. We are fifty or a hundred years behind the advanced countries. We must make good this lag in ten years. Either we do so or they crush us'; thus spoke Stalin in 1931, quoted by Deutscher, 1961, p. 328); that planning was seen as an act of mobilization of physical and personal resources, according to the teleological approach. To talk of 'disappearance of planning in the plan' (Lewin, 1973) because of ambitious and unrealistic targets seriously underestimates the degree of central steering and control. It is true however that the massive accumulation effort and the teleological approach caused three main features of Soviet planning: the tightness, or tautness of the plans; the ensuing establishment of a set of priorities for key products (the 'leading links') which happen

to represent bottlenecks; the emphasis on physical magnitudes and the very minor role assigned to prices.

2) the forced collectivization of agriculture. The operation had a huge human cost, which cannot be ignored in its economic evaluation. However there has been a tendency recently to cast doubts on the effectiveness of collectivization even leaving aside the human cost, mostly on two grounds. The first is reliance on Chayanov's work on the peasant economy (1966; Lewin, 1968), stressing the development potential of traditional agriculture. However, Chayanov's analysis of the unresponsiveness of peasant agriculture to external stimuli and his expectation of a slow pace of spontaneous collectivization weaken or possibly reverse the assessment of that potential. The second reason for reconsidering the effectiveness of collectivization is the fresh empirical evidence on the measurement of agricultural 'surplus' provided by Barsov (1969, reviewed by **Millar**, 1974); it turns out that—far from exacting a 'tribute' from the peasants by means of unequal exchange, as Stalin intended—collectivization neither worsened the terms of trade between agriculture and industry, nor made a positive contribution to the finance of primitive socialist accumulation. The fact that peasants were less badly done by—in economic terms—than was previously thought, however, does not mean that collectivization was generally ineffective from the viewpoint of industrialization. As **Ellman** rightly points out, collectivized agriculture provided a greatly increased supply of wage goods (which, we might add, would have probably required terms of trade even more favourable to agriculture in the absence of collectivization, i.e., a greater drain on investable resources); it provided industry with a large addition to its labour force, unthinkable without collectivization due to the falling living conditions in the towns; it provided substantial exports; contributed to import substitution (by increasing output of cotton and tea) and it was transformed into a residual sector which absorbed shocks such as bad harvests (**Ellman**, 1975, pp. 858-9). Besides, it has been pointed out recently that meteorological conditions in the 1928-32 period were 'particularly catastrophic' (**Cooper-Davies-Wheatcroft**, 1977), which turns previous assessments of collectivization into underestimates. These arguments are not, *per se*, an economic justification of forced collectivization; they simply weaken the case for spontaneous collectivization, and stress its contribution to industrialization.

3) the setting up of a sectoral structure of economic government, with the reorganization of the Supreme Council of the National

Economy (better known as *Vesenkha*) into three industrial People's Commissariats or Ministries—the first step in a process of increasing specialization of Commissariats according to industries which continued until 1953. The ministerial **sectoral** structure, with chief-departments (*glavki*) reappearing with responsibilities for functional aspects such as finance, supplies, investment, will remain the backbone of central planning until 1957, with the central planning commission (Gosplan) with basically advisory rather than executive functions. Of course the number of Ministries and their subdivisions, the relative scope of republican and all-union Ministries, the specific tasks of Gosplan (for instance, the relative scope of short versus long-run planning) altered over time, and other organs of coordination or specific competence emerged and disappeared, but the basic structure of the centralization of supply and sales remained fundamentally unchanged until the 1957 reform in the Soviet Union.

4) the reinforcement of central control by means of the financial monitoring of plan implementation, the so-called 'control by the rouble'. In 1930-32 the state bank assumed a new role, not only as a central bank, but as a bank having the monopoly of short-term lending, a monopoly enforced with the prohibition of direct financing of firms by suppliers and customers. The basic principles of operation of money and credit are those of providing the payment flows corresponding to the planned physical flows, and the separation of financial flows into two separate circuits, one of cash for the payments of wages and the purchase of consumption goods, the other of bank money consisting of book entries in the bank accounts of enterprises for purchases and deliveries of goods between themselves.

5) the confirmation of the principle of economic accounting (or *khozraschot*), i.e., the covering of costs by receipts and the making of the planned profit (or planned loss),¹⁰ any additional profit being siphoned off into the state budget by a turnover tax (practically a tax by difference, indistinguishable from profit), investment funds and most of the working capital being obtained free of charge from the state budget (subject to the observance of official rules concerning the choice of techniques). The retention of profit by enterprises was governed by, and did not govern, the rate of accumulation.

6) prices or price-fixing criteria were decided centrally; production goods were available to enterprise at those prices via direct allocation in conformity with planned tasks; consumption goods were available to consumers at those prices subject to availability; if

consumer prices were not market-clearing prices, either goods piled up in excess inventories or shortages (queueing, waiting lists, black markets) developed. The price level of consumer goods rose dramatically from the inception of the first Five Year Plan to the early fifties, partly because of wage drift, partly because of planned pressure on real consumption to finance capital accumulation, partly because of under-fulfilment of plans for consumption goods which ranked low in the system of priorities.

7) one-man management (*edionachalie*), terminating— theoretically at the end of the twenties, in practice much later—the 'triangle' made by the union, the party cell and the manager. The director and other managerial officers had not only a salary but also a system of progressive bonuses for the fulfilment and over-fulfilment of various indicators of performance, mostly expressed in physical units, in terms of gross output, except for the use of constant (rather than actual current) prices for the aggregation of heterogeneous products of the same enterprise.

8) the transformation of trade unions from *organs* for the promotion of workers' class interest to production-minded institutions, with a narrow role in welfare and social insurance, and totally subservient to the government wishes;

9) the rejection of egalitarian principles (*uravnilovka*) in the structure of wages and other material rewards, (given above all the scarcity of skilled labour), as well as in privileged access to consumption goods for selected categories, and the widespread use of piece-rate payment systems. There were also non-material incentives relying on 'socialist emulation', shock workers, and other initiatives for the mobilization of labour and working effort.

10) finally, the systematic undertaking of capital accumulation on an increasing wale, with priority to industry rather than agriculture, heavy rather than light industry, the sectors producing production goods rather than consumption goods. This feature of the new social formation—which we could call centralized socialism—is put at the bottom of the list here in order to allow a convenient digression on its rationale, because the system's high propensity to accumulate—indeed, I will argue later on, its excessively high propensity to accumulate—is an important factor in the analysis of the contradictions of the system and the modality of its transformation.

“Accumulate! Accumulate!": the maxim that **Marx** had associated with capitalism, became the maxim of those who claimed to be his *followers*' (Hicks, 1966, p. 264). In the Soviet Union the rapid increase in investment began in 1928, and continued up to

1936 with only one year of relaxation in 1933. Abram Bergson's calculations of the share of accumulation in national income (including services) at current prices came to 23 per cent in 1928, 21 per cent in 1937, 23 per cent in 1950 and 24 per cent in 1955. After the war, in Eastern Europe and the USSR the share of accumulation in the net national material product was for so long—with the exception of East Germany and Czechoslovakia—within small margins of 25 per cent, that United Nations sources refer to 'the pragmatic rule... that about a quarter of (material) national income should ideally be allocated to accumulation' as the guiding principle of investment policy in these countries (UN-ECE, 1967, Ch. 7, p. 7) The drive to intense capital accumulation concentrated in heavy industry was the direct consequence of the decision to accelerate economic growth in the specific Soviet conditions: a closed economy, abundant labour, availability of materials, scarcity of capital, small productive capacity in the sectors producing capital goods. But the new system set in motion forces which at various levels in the economy transformed this particular policy into a general tendency. This also led, whenever options were open and considered, to the choice of a particularly intensive version of this accumulation policy; while at the stage of implementation priority was systematically given to the fulfilment and over-fulfilment of investment plans at the expense of consumption.

This high propensity to accumulate is regarded by some critics of the Soviet economy as a connotation of the class interest of the bureaucracy. **Harman**, for instance, argues that '... the bureaucrats... control the means of production, which they attempt to expand at a faster speed than their rivals internationally. This they can only do by holding back workers' living standards, by acting as a bitter opposition to working-class interests, both domestically and internationally' (1974, pp. 18-19). Kuron and Modzelewski similarly argue that 'the material power of the bureaucracy, the scope of its authority over production, its international position (very important for a class organized as a group identifying itself with the state) all this depends on the size of national capital. Consequently, the bureaucracy wants to increase capital, to enlarge the producing apparatus, to accumulate' (1968, p. 17); 'Production for consumption is from its [the bureaucracy's] class point of view, a necessary evil, whereas production for production is its goal' (1968, p. 18).

Yet there is no *a priori* reason to suppose that the accumulation drive of the socialist mode of production must be due to the interest

of a particular class or pressure group. It is perfectly conceivable for the central decision makers (meaning anybody who is in a position to affect the rate of accumulation in the economy) to act individually and out of altruistic concern, without benefiting in any way either individually or as a group, and yet generate more accumulation than the population as a whole would have wished if given a choice. The point is that the central decision makers in the socialist society considered 1) are likely to have a longer time horizon than the rest of the population; 2) are concerned with the survival of the system and with reaching a level of affluence consistent with the transition to full communism; 3) are not constrained—in the Soviet version of 'democratic centralism'—by the need to present alternatives to the population and seek its consent for the pursuit of an accumulation policy. This is sufficient to generate an accumulation bias.

It is difficult to establish whether the same kind of accumulation bias is present at the micro-level, i.e., at the level of state enterprises. In this system enterprise managers are directed from above, but they have power of initiative, they participate in rounds of bargaining with the centre and the Ministry for the definition of their technical-financial plan, and they have considerable discretion about which of the many directions and rules to break; they can also modify to their advantage the information flow in their communications with the centre. Their structure of rewards is not entirely dissimilar to that of the managers of corporations in capitalist economies. They receive a salary, an important **bonus** for fulfilment and over-fulfilment of output plans, subject to a minimum profit constraint; their status and prestige in the community depends also on the size of the enterprise they direct, and their prospects for a higher salary (and possibly for career advancement) are also related to growth and therefore accumulation in their enterprise. Unlike their capitalist counterparts, they have no discretion about the reinvestment of their profit—at least in theory, though in practice higher than planned profits makes it easier to undertake more investment than planned; on the other hand, they pay no interest on their funds (except on a fraction of their working capital), do not have to worry about gearing ratios, **debt/service** ratios, the stock market evaluation of their shares, take-over bids due to excessive growth, or **bankruptcy**, all the things which constrain the accumulation drive of capitalist managers. State enterprises under centralized socialism cannot move outside their sector of operation, but their managers can probably enlist local support for expansionary projects.

In conclusion, it seems plausible that, even if managers of state enterprises could not exercise and initiate a bias in favour of accumulation—which they very well might—there seems to be no apparent reason why they should oppose the high propensity to accumulate of the central organs. In these conditions the priority to accumulation, especially in heavy industry, turns a particular policy which is plausible under special conditions into a general and glorified norm of conduct, and an integral part of the 'superstructure' of the Soviet-type system (Nutti, 1978). This is a fundamental difference between economic systems. Capitalism has a tendency to chronic under-investment, as witnessed by the 15 million unemployed today in the Western world, frustrating democratic institutions because private ownership and free enterprise take capital accumulation away from parliamentary and government control. Socialism creates the preconditions for a public control over accumulation, given public ownership and macro-economic planning, but economic and political centralization equally take accumulation away from public control; thereby generating chronic over-investment even—as we shall see—in conditions of full employment of labour.

The 'superstructure' of the Soviet model of centralized socialism under Stalin's rule was also made of other, sinister and unpalatable, features: namely, Stalin's terror and repression. Roy Medvedev sees Stalin's despotism as being primarily the product of Stalin's personality and will, apparently fearing that the consideration of historical trends might lead to a denial of Stalin's responsibility (Medvedev, 1971, and the editor's introduction). There is no reason, however, why one should not pass on Stalin whatever moral judgement one sees fit and yet put at least some of his actions in a historical perspective.

First, there is a connection between some of Stalin's policies and the experience of War Communism. Deutscher writes: 'There was hardly a single plank in Trotsky's programme of 1920-1 which Stalin did not use during the industrial revolution of the thirties. He introduced conscription and direction of labour; he insisted that the trade unions should adopt a "productionist" policy instead of defending the consumer interest of the workers; he deprived the trade unions of the last vestige of autonomy and transformed them into tools of the state. He set himself up as the protector of the managerial groups, on whom he bestowed privileges of which Trotsky had not even dreamt. He ordered "socialist emulations" in the factories and mines; and did so in words unceremoniously

and literally taken from Trotsky. He put into effect his own ruthless version of "Soviet Taylorism" which Trotsky had advocated. And finally he passed from Trotsky's intellectual and historical arguments ambiguously justifying forced labour to its mass application' (Deutscher, 1954, p. 515). Then there were the implications of the gradual decline of the party's internal life, from the ban on factions to the monopoly of the Stalinist faction, to the personal rule of the faction's chief (Deutscher, 1967, p. 31-33). Brus argues that the centralized 'étatist' model of socialism '*étatises* the party too: the most direct manifestation of this being the mutual interpenetration of the party apparatus and the state apparatus of repression; hence Brus concludes that 'the Ctatist model of socialism does not meet the criteria of socialization of the means of production' (Brus, 1975, pp. 54-7). Bahro relates Stalinism to the pressure of the technical superiority of imperialist countries and their policy of military intervention and encirclement, the constant external threat creating 'the specific fortress neurosis in which friend and foe could no longer be distinguished'; and also, ultimately, to the combination of the Russian semi-Asiatic past and the formidable task of industrialization, generating 'industrial despotism' (Bahro, 1978, Ch. 3).

The social formation which emerged in the Soviet Union at the turn of the thirties achieved an impressive economic performance. The actual measurement of Soviet economic growth has been the object of lengthy discussions, but, even if we disregard official indexes, we find that independent Western computations indicate a threefold increase in industrial production from 1928 to 1937 (of which a twofold increase was from 1932 to 1937) with a further increase of about two and a half from 1937 to 1955 (Bergson, 1961; Nutter, 1962; Trembl-Hardt, 1972). Such speed of industrial development was accompanied by unprecedented urbanization; the rise of active population of both sexes; the achievement of high standards of education. Soviet 'real' household consumption per capita, however, actually declined between 1928 and 1940 (at a rate of 0.6 per cent per year), grew at a modest rate in the forties (1.9 per cent) and did not start rising significantly until the fifties (6.7 per cent per year in 1950-55); (Bergson, 1961). Victory in war and survival in a hostile environment were also no small—though difficult to quantify—achievements.

These achievements, however, were accompanied by a mounting range of problems, deeply rooted in the production relations of the centralized socialist formation examined above. These problems were partly the same kind of problems that had arisen during the

period of War Communism (see above) but other problems developed as the permanence of centralized planning over time led to learned patterns of behaviour—among the participants in the planning and production process—and the cumulative build-up of drawbacks, holding back the further economic progress of the system. The first official recognition of these problems is contained in Bulganin's Report to the CC of the CPSU in July 1955. Bulganin lists:

1) the autarkic tendencies of the **sectoral** Ministerial system, trying to secure supplies by a costly vertical integration;

2) the delay with which enterprises received their plans;

3) the failure to secure regular supplies, producing structural under-utilization of plant;

4) the neglect of the quality of products, and of the introduction of new products, due to the purely quantitative methods of **planning** and of assessment of performance;

5) the systematic mismatching of production assortment and the structure of demand—especially in the field of consumption goods—because of selective over- and under-fulfilments by enterprises;

6) the 'petty tutelage' exercised by Ministries and party committees over managers, which, reducing their power, also discouraged initiative;

7) the cyclical nature of production, with the concentration of output towards the end of the plan period (*shturmovchina*);

8) the emergence of regional unbalances. To alleviate these problems, Bulganin suggested in his report three main remedies: the introduction of greater material incentives; greater autonomy for the enterprise director, and greater use of foreign technology. There were also other problems, which were reported in the press and increasingly debated by economists and engineers:

9) gross distortions in the use of inputs or in the quality of output due to the physical indicators used, and to the 'cult of gross output' (*kult vala*);

10) the concealment of reserves of productive capacity by managers desiring to be in a position to fulfil the plan comfortably; managerial restraint in over-fulfilling, for fear of the centre systematically upping planned targets over the best past performance; managerial attempt at negotiating lower output targets and greater input assignments (of both working and fixed capital) than technically necessary.

Basically, the model of centralized socialism that had proved

suitable to Soviet conditions at the turn of the thirties and to the objectives of the thirties and forties, was becoming inadequate to the Soviet economy in the fifties, centralized socialism had delivered —at a cost— industrialization, victory in war and reconstruction, but was becoming increasingly inadequate to manage what we could loosely term 'economic maturity'. Yet the Soviet centralized model was transplanted, without any adaptation, to the other **East-European** countries that started on the road to socialism after the last war.

6. The Other Socialist Economies of Eastern Europe; Economic Reforms

Some of the conditions of Eastern European countries were similar to those of the Soviet Union and conformed to the Soviet-type model: 1) their economies were relatively underdeveloped, agricultural and labour-abundant, with the exception of the Bohemian region in Czechoslovakia, the Silesian region in Poland, and East Germany (which however was less developed than West Germany); 2) with the exception of Czechoslovakia, they had not had much experience of parliamentary democracy and had been ruled by either foreign or domestic dictatorships in the inter-war period; 3) they were facing the tasks of reconstruction after the war; 4) they also operated in a hostile international environment, socialism in ten countries being not significantly different from socialism in one country (as demonstrated among others by the cases of Spain, Vietnam, Chile, etc.).

But these countries also had specific conditions which did not conform to the Soviet mode of production; nor with its Stalinist superstructure. Brus lists some of these different conditions: 1) the generally higher level of economic development and social diversity in the People's Democracies, with respect to that of Russia in 1917, which not only made the drawbacks experienced in the Soviet Union more immediately felt, but also made the positive results of the model more weakly perceived by the population and less politically effective; 2) a higher degree of development of democratic institutions, in short of 'the level of civilization in relations between people', as well as a stronger cultural and economic link with the West; this made the purely educational function of Soviet ideology less effective, indeed caused a greater perception 'of the disparity between slogans and reality'; 3) the weakness of the internal roots of the socialist revolution, that made socialism an imported product imposed from outside (with the exception of Czechoslovakia, where the Communist Party won nearly 40 per cent of the total vote in the

free elections of 1946, and of Yugoslavia where the transition to socialism enjoyed the support of internal forces; internal support was also generated everywhere by agrarian reforms); 4) 'the factual domination of the Soviet Union over the People's Democracies, multiplied in some cases—particularly Poland—by factors of a historical and psychological nature, made it difficult to use nationalistic ideology as an instrument for political attraction of the masses', although the German question provided some nationalistic backing for the leading role of the Soviet Union (Brus, 1975, Ch. 2, section 2).

The transplant of a uniform and ready-made model of socialism had two other adverse effects. First, there was 'no return to the system of soviets of **Lenin's** time, which also facilitated their adaptation since it permitted them to be formally linked with the traditional institutions (parliament, direct elections, universal franchise, etc.)' (Brus, 1975, p. 60); in other words, the genetic inheritance which might have permitted the quicker development of a socialist 'mutant' more suitable to East European conditions was effectively lost. Second, the Soviet discouragement of the development of socialist mutations hindered the very evolution of the socialist mode of production. In fact, as Bahro incisively puts it, backing his statement with **Marxian** material, 'in the evolution of species we find that the most advanced form at time t never originates from the form furthest developed at time $t-1$. It is always a branch that is not yet too highly specialized, and with too restricted a structure, a still "unformed" branch, that reaches the next highest level' (Bahro, p. 64). In other words, even if we regard the Soviet centralized model as the peak of socialism at the end of the last war, we should expect the further development of socialism to take the form of the emergence and development of a side branch, rather than the further perfecting of the Soviet model. In the event, the only new 'mutant' of European socialism was Yugoslav self-management of 'associationist socialism'; the description and assessment of that model goes beyond the scope of this paper, but the presence of strong syndicalistic and capitalistic elements in that system make it an unlikely candidate for the progress of the socialist model.¹¹

The progressive unsuitability of the Soviet centralized model of socialism to Soviet conditions at the turn of the fifties, let alone to East-European conditions after reconstruction, roughly at the same time, led to the emergence and the exacerbation, everywhere in the area, of the drawbacks of the system already discussed in the previous section. Pressure for economic and political change

mounted. Evidence of this can be found in the official endorsement of criticisms of the functioning of the system; the East German events of 1953; the Poznan events of 1956; the Hungarian events of 1956; the accumulation of above norm inventories of consumption goods nearing saturation (cameras, watches, bicycles, low quality textiles, etc.); the slowing down of the pace of economic development at the turn of the sixties, at a time of acceleration of growth in Western economies; the recurrence of economic fluctuations in the increments (and sometimes even the levels) of income, consumption and accumulation (Ellman, 1973). The situation was worsened by the progressive reduction of reserves of labour and natural resources around 1960, which is probably responsible for the deterioration and unsteadiness of growth.

These pressures for change, and especially the advisability of a 'change of gear' due to the transition from extensive to intensive stages of development, were rationalized in East-European literature under the guise of a theory of socialist evolution reminiscent of Marxian political economy. The Soviet-type centralized model of socialism—it was argued—was best suited to economies experiencing extensive economic development due to the use of increasing amounts of labour and investment in conditions of ample reserves of labour and raw materials; now that those reserves were being exhausted the East-European economies were switching to intensive development depending primarily on productivity increases, and the new emphasis on efficiency and technical progress required a change of the socialist model in the direction of decisional decentralization with a greater scope for enterprise autonomy and market relations¹². The very distinction between extensive and intensive factors of development—in the sense used in this context of a distinction between the relative contribution of various inputs increases and of technical progress—is purely conceptual and presents formidable theoretical and empirical problems¹³. Nevertheless, the distinction between economies with or without natural and labour reserves, and the transition from one condition to the other, must be an important factor explaining and promoting change, especially within the Marxian tradition attaching so much importance to the necessary correspondence between the development of productive forces and of productive relations. In spite of its wide and uncritical acceptance in the West,¹⁴ however, a theory of socialist evolution stating the transition from a system for extensive development to one for intensive development is too crude and simple. Why was the lack of correspondence, or even contradiction, between

centralized socialism and economic maturity not resolved by a simple gradual change of the socialist model, towards forms of decentralization?

The actual progress of economic reform in East-European countries and the Soviet Union does not follow any such simple pattern of change. In the mid fifties, i.e., before labour and natural resources scarcities were felt, a reform movement appeared and receded not only in Hungary (where it was forcibly truncated) but also in Poland (1956-8). In the Soviet Union Bulganin's 1955 suggestions remained a dead letter, and in 1957 measures for regional decentralization were adopted instead, with the institution of regional economic councils (the *sovnarkhozy*) which reproduced and indeed enhanced at the regional level all the problems of the centralized Soviet system, substituting localism (*mestnichestvo*) and regional autarky for the autarky of the abolished Ministries; that reform was—as Nove puts it— 'not a step forward, but a step sideways'. (Nove-Nuti, 1972). Towards the mid sixties a new wave of reforms would seem, at first sight, to make a clean sweep of the old economic system. In 1965 in the Soviet Union, for instance, after ample discussions the regional economic councils are abolished and old-fashioned sectoral Ministries take their place; the enterprise however is given greater autonomy and discretion, actual revenue and profitability are used to measure the performance of enterprises, and material incentives linked to those measurements are paid to managers and workers. Managers are empowered with the reinvestment of some of their profits; they have access to credit at an interest rate instead of getting investment funds free of charge from the state budget; in general, a greater 'market discipline' is envisaged, to replace the structure of central planning. Yet a couple of years later the reform stops short of the promised measures of decentralization and begins to recede, so much so as to be called 'the reform that never was'. Other countries present a similar experience (perhaps with the exception of Hungary, at least until recently). Everywhere we still find excess demand due to persistent accumulation pressure, sectoral immobility of enterprises, central control of inter-industry transactions and deliveries (Ellman, 1977, Nuti, 1978). New phenomena appear, such as the attempt to solve centrally planning problems by the application of mathematical methods, the increased reliance on the import of foreign technology, the emergence and development of large corporations in industry (everywhere in Eastern Europe from the turn of the seventies) accompanied by increasing industrial concentration (Nuti, 1977). This process is

associated with conflicts and confrontations ranging from international incidents to food riots.

Obviously there is no simple, monotonic relationship between the level of development and economic or political decentralization, applicable to the post-war evolution of the socialist economies of Eastern Europe. In the rest of this paper a more complex picture of the interaction between these factors is attempted, in order to comprehend and unify the phenomena described above. Starting from a number of observations a model is constructed, and its possible behaviour over time is investigated.

7. A Marxist Model

The following observations about the relationship between capital accumulation, economic and political decentralization are central to our discussion of the current contradictions of the socialist economies and the pattern of their possible resolution.

1) No economic decentralization was contemplated, or even discussed, until after **Stalin's** death (1953) and the political liberalization represented by the denunciation of Stalin and the mooting of destalinization at the **XXth** Congress. In Yugoslavia, decentralization began before 1953, but was preceded by other forms of political liberalization.

2) The only country where economic decentralization was allowed to develop in the fifties (apart from Yugoslavia) was Poland, and this was not only preceded by political liberalization, with the advent of Gomulka to power in the autumn of 1956, but was also followed by further political decentralization (such as, for instance, the spontaneous emergence of workers' councils at factory level, outspokenness in political and economic discussion, etc.). In Hungary, where economic conditions were very similar to those of Poland, the crushing of the experiment of political decentralization marked the end of any prospective economic reform for a decade. Even the Soviet regional decentralization of 1957 was followed by political changes such as **Krushchev's** division of the party between industrial and agricultural sections—which can be considered as a form of political decentralization, or at least of political diffusion. In Czechoslovakia in 1958 this link between reform and political developments, reinforcing each other, is also confirmed.

3) The destalinization process and the limited measures of democratization in Eastern **European** countries led to a short-lived consumption boom in the second half of the fifties. In Poland **Gomulka's** fall in December 1970 was followed by an acceleration of consumption;

4) the Polish decentralization of **1956** was made possible by the acceleration of consumption growth, which alleviated some of the previous accumulation pressure (resulting in the actual fall of real consumption per capita in the early fifties); the decentralization came to an end at a time—and, I would argue, because—of reintensification of the accumulation effort. In the Soviet Union, conversely, **Bulganin's** endorsement of material incentives and greater autonomy for enterprises, followed in **1955** by a decree on the rights of enterprise directors, and in the Plenum of December **1956** by **Peruvkin's** proposals for economic decentralization, were abandoned in the investment crisis which endangered the sixth Five Year Plan by the end of its first year. The same relationship between lack of success or end of reform and the intensification of the accumulation effort can be observed for the East-European reforms of the mid fifties, as well as for the recent recentralization in Poland after the institutional changes of **1974**.

This pattern of events, which cannot be explained by a crude Mam-inspired view of the connection between development level and centralization, can be explained by—and provides empirical evidence for—a model of dialectical interaction between capital accumulation, economic decentralization and political liberalization. The model consists of the following generalizations:

1) economic decentralization is both preceded and followed by political liberalization;¹⁵

2) the model of centralized socialism and its 'superstructure' lead to a strong bias in favour of capital accumulation (see above, section 5);

3) intensive capital accumulation with the passing of time and because of its own success in raising income and consumption reveals to an increasing extent the drawbacks of the centralized model (listed in section 5 above), among other reasons because of the increasing complexity of the structure of the economy and technological advance, and because of the greater unpredictability of consumer behaviour at higher levels of consumption per capita;

4) economic decentralization, however, can only be successful if introduced in the absence of excess demand, i.e., in the absence of the economic strain generated by intensive and accelerated accumulation (unless the pressure is eased by external factors, such as massive foreign aid, or the relaxation of the defence effort, or a substantial improvement in the terms of trade, or a sudden, unexpected and substantial technological advance; conversely, any adverse trend in these factors militates against the feasibility and success of decentralization);

5) the bias in favour of capital accumulation exhibited by the centralised socialist model can be eliminated only by a measure of political democratization, reinstating the social and political control of the wider population over the level and direction of capital accumulation. Such control is a fundamental prerequisite of the genuine *socialization of the means of production*; it is not guaranteed by the mere presence, next to the party, of organized sectional interest groups no matter how vocal, nor even by the 'incorporation' of the working class into the socialist state. The sheer failure of the centralized model to deliver the economic goods is not sufficient to generate economic decentralization; on the contrary, the central authorities are likely to react to a deterioration of economic performance with the tightening up of both economic and political centralisation.

We can now formulate conjectures about **Marxian** 'laws of motion' of the model of centralized socialism. Two development paths can be envisaged. The first is a *virtuous circle* leading to the smooth progress of both economic forces and productive relations envisaged by the official Soviet-type texts of the political economy of socialism. The second is a *vicious circle* leading to a pattern of economic and institutional cycles of a kind which is closer to the actual experience of the Soviet Union and the East-European countries, which may last for an indefinite period until it gathers the impetus to transform itself into a virtuous circle, because of an endogenous modification of the parameters or a change in external factors such as those mentioned above. In theory this vicious circle could end with the collapse of the system; I would rule this out not through optimism but because of the positive **if** slow adaptability of the socialist mode of production observable in the transition from War Communism to NEP, from NEP to the centralized model, to forms of regional and functional decentralization, the existence of the Yugoslav model, the development of the Chinese model; besides, the capitalist mode of production seems long past its prime and is ridden with its own conflicts and contradictions, so that it does not represent a credible alternative.

The first course, of harmonious development, would have to start with an autonomous initiative of political democratization (such as that promised by the **1956** destalinization, or the Prague Spring in **1968**). As long as the leading and dominant position of the Soviet Union lasts, this political democratization will have to originate from the Soviet Union. Bahro appears confident of good prospects for such a democratization, because of the failure of the monolithic

party structure to conform with the interests of potential development, and because of the capacity for change displayed by the Czech Communist Party in the mid sixties. Brus stresses the sheer informational advantages of a democratization process, which appear indispensable for the rational conduct of economic affairs (Brus, 1975, Ch. 4). Whatever the strength of these arguments, an important role must be assigned to external factors, political and economic: neither the oil crisis, nor the right-wing exploitation of Czech democratization in 1968, nor the selective right-wing endorsement of Soviet and East-European dissenters while ignoring both left-wing dissent in those countries and macroscopic forms of repression in capitalist countries, nor a Western-Chinese rapprochement, are likely to favour such a process of political democratization.

Suppose such a process could start and gather momentum without regressing to forms of bourgeois liberalism (a class-based multi-party system, for instance, would be a regressive step in countries which have nationalized the entirety of the means of production; see Bahro, 1978, Ch. 12). Genuine social control could then be reinstated over the level of direction of accumulation and development; a deceleration of the accumulation effort would be likely to follow, creating the economic conditions for the successful introduction of measures of economic decentralization. These measures would be required by objective conditions and would be tailored to those conditions by general participation in their shaping. In turn, economic decentralization would be likely to lead to further democratization (ranging from a greater participation of workers in management to better protection of consumers and other sectional interests in the community). The **danger** would arise of excessive strides towards decentralization, regressing to forms of capitalism or of syndicalism. During the Prague Spring, for instance, there were proposals for the re-establishment of free trade and currency convertibility, the immediate exposure to the penetration of foreign capital, the deliberate creation of unemployment to make the economy more flexible, as well as the revamping of inequalitarian middle-class interests; these proposals appear to have enjoyed the support of members of the government. On the other hand, the transplantation of the Yugoslav-type market economy and syndicalistic self-management would effectively destroy any chance of social control over the macro-economics of employment, accumulation and growth, landing the system in the same problems and contradictions of the Yugoslav and the capitalist economy: chronic under-investment, inflation, personal and regional inequalities,

unemployment, and so on. If a course could be steered, clear of these dangers and involutions into capitalism or back into centralized socialism, any further progress would have to come to grips with an entirely different range of problems, such as the very foundations of the division of labour in society, discussed by Marx and Engels in their characterization of 'full communism' or a change in the structure of needs. This is uncharted territory, and to address ourselves to these problems is not only premature and futile, but also counterproductive and damaging because it alters the focus and distorts the perspective in which current problems are analysed.

The other development path, which is what we actually witness in the experience of the socialist countries of Eastern Europe, is a familiar economic and institutional cycle, locking the same factors analysed above into a vicious circle. The cycle starts with measures of economic decentralization, motivated by a deterioration of economic performance due to the drawbacks of the centralized system, and made possible by a minimum of relaxation of central political control. Political democratization (in the sense of reinstatement of genuine social control over macro-economic trends) does not go far enough, or quickly enough, to overcome the built-in accumulation bias of the old system. As a consequence, the economy remains in a state of strain and pressure on resources which does not give the economic decentralization measures a chance to operate in a congenial environment; inflation and economic anarchy are likely to result. Even if decentralization worked, it would not have a significant impact on the living standards of the population, and therefore would not be perceived as a progressive evolution; the opposition of those sections of the population which are at least temporarily adversely affected by the reform (such as the traditionally-minded enterprise-managers, the workers displaced by economic reform—as in the widely-known Schechino case in the Soviet Union,—the groups which improve their position absolutely but worsen it in relative terms) prevails over the mild support (or indifference) of those who enjoy the small, and thinly spread, benefits of the reform. The decentralization process comes to an end; disappointment with the results leads to a tightening up of central control, both economic and political; accumulation continues its course, regenerating, possibly to a greater extent, the already known drawbacks of the old system. The economic and political cycle starts again.

In this cycle the transition from 'extensive' to 'intensive' growth (discussed in the previous section) plays an important role in

triggering off the process of change, when accumulation policies which may have been plausible—at least in principle—with the reserves of labour and natural resources are continued without the same justification after those reserves are no longer available. Thus the transition may explain the *timing* of the reform movement, but its role in explaining the actual development and success of the reform movement can only be limited, as it is just one piece of the puzzle we have tried to piece together. The continued importance of the new stage of development reached by East-European socialist countries is due to the failure of accumulation policy to adjust itself to the new conditions.

In fact, labour availability has become strained in all East-European countries (except Albania) in the first half of the seventies. The natural growth rate of the population has been falling; the outflow of agricultural labour has decelerated in absolute terms; the participation of the female population of working age has virtually the same rate as that of men; the re-employment of retired people has been stimulated, but this can only be a limited source of additional labour; possibilities of employing foreign labour remain extremely limited. Labour shortages are reported in many branches, most frequently in construction; regional and **sectoral** shortages are present even in countries with relatively abundant labour (UN-ECE, 1977). Another constraint is given by the supply of material inputs (raw materials, fuel and power, agricultural production) and recent developments in world markets have highlighted the increasing strains. These countries have been relatively protected from the worst effects of the oil crisis, due to the Soviet Union being a net oil exporter and to the availability of coal, the Soviet supply of oil to other East-European countries on long-term contracts and at a price gradually rising but lagging behind the international price of oil (especially on the spot market); the relative insulation of East-European countries from the inflationary impact of the price rise of oil and materials. But these countries have suffered from the oil crisis indirectly through the impact of the world recession on their foreign trade; also, future prospects for reserves and technology are not promising, as the exploitation of new resources (such as in Siberia) require both new technology and huge investment costs. Hence the shift from the accelerated development of heavy industry to a more balanced growth that includes formerly neglected sectors such as agriculture and consumer goods industries, and new industries as chemicals.

In the seventies growth performance has been reasonably **good**, in

spite of the declining pace (growth of net material growth has averaged 7.4 per cent in 1966-70 and 6.2 per cent in 1971-5, and is planned at an average 5.3 per cent in the 1976-80 plans in the whole of Eastern Europe and the Soviet Union). But growth is being 'bought' at increasing additional costs in terms of investment, and there are manifest signs of strain, such as the mounting foreign indebtedness of East-European countries, and the increasing inflationary pressure on consumption (Nuti, 1978). Yet there is no sign of a change of gear in accumulation policy in the current Five Year Plans, and gross investment ratios (as a percentage of national product) are actually increasing throughout the area (in the Soviet Union from 27 per cent in 1966-70 to 29.9 per cent in 1970-71 and 29.5-30.1 per cent in the current Five Year Plan; higher shares and increases are recorded in the rest of the area). Socialist demand for growth seems to be rigid with respect to the price of growth in terms of forsaken current consumption.

Is capital accumulation in the socialist economies of Eastern Europe excessive? Two arguments can be used to substantiate a positive answer. The first is Kalecki's postulate of socialist accumulation policy, that the planning authorities should only be willing to 'buy'⁷—as it were—additional points of percentage growth of income at an increasingly smaller sacrifice in terms of the additional percentage of current income that has to be withdrawn from consumption and accumulated. By the standard of this postulate, socialist accumulation has **been** excessive at least during the seventies, because a lower growth has been 'bought', as we have seen, at a higher total cost in terms of accumulation shares. In spite of the apparent plausibility of the postulate, Kalecki's argument has no necessity; in more familiar terms, it amounts to saying that the share of a consumer's expenditure on a given good should be a decreasing function of the price of that good, and we know from consumer theory that the validity of this proposition depends on the actual preferences of the consumer. In the same way, the validity of the Kalecki postulate is not universal but depends on the actual preferences of the socialist leadership between current and future consumption. But there is another angle to Kalecki's theory of socialist accumulation that considerably strengthens his case; namely, it is very plausible to assume that a 'socialist planner' should not be willing to raise the share of accumulation in national income if this leads to higher *income* but not to higher *permanently maintainable consumption*, the positive impact of growth on consumption levels being more than offset by the negative impact of a higher rate of

accumulation. If this milder restriction on the time preferences of the 'social planner' is accepted, then there is indirect evidence that accumulation in the socialist economies is 'excessive' in **Kalecki's** sense: the sacrifices of the population will only pay off in the long run if and when the accumulation policy is reversed.

The other argument for regarding socialist accumulation in Eastern Europe as 'excessive' is not deductive but empirical, and rests on the observation of very broad margins of unutilized capital equipment in many industries. This 'petrification of capital' (**Staniszkis**, 1979) is not due to lack of effective demand, as in capitalist countries, but to structural problems: namely, capital being immobilized in the wrong sector, or in the wrong technical form, or simply unused because of difficulties in the supply of materials and components. This can be the consequence of the unsuitability of the planning apparatus to the level of development; it raises the costs of growth and undermines the case for further accumulation unaccompanied by an attempt to remove those structural problems.

On the basis of these two arguments, we can say that there is at least a presumption that accumulation is excessive in Eastern Europe. Since accumulation rates are high and rising, something else has to give way. In the repetition of the political cycle described above, the pressure of accumulation and its low productivity are the mainspring of further economic and institutional changes. In particular, three important aspects of East-European development fall neatly into place within this framework of analysis, though here they can only be mentioned in passing:

1) the diffusion and increasing reliance on mathematical methods in economic planning, regarded as a possible substitute for economic decentralization, replacing the informational role of markets with automatic data processing (**Lange**, 1967, **Ellman**, 1973). Apart from being still a poor substitute for economic decentralization, limited as it is to specific problems and areas in its effectiveness, the diffusion of mathematical methods does not promote or replace political democratization and cannot, in itself, alleviate the contradictions of the socialist economies.

2) the increasing trade dependence on the West in the importation of modern and advanced machinery to narrow the technological gap. The existence and permanence of a technological gap is well documented (**Amann-Cooper-Davies**, 1977). The introduction of more advanced Western technology raises the productivity of investment and allows the system to absorb more accumulation than would be possible with local technology. For Poland, for instance, it

has been calculated that an increase in machinery imports from the West by about 10 per cent of all the machinery investment leads to a 1 per cent acceleration in the growth of industrial labour productivity (Gomulka, 1977); other East-European countries record an even higher contribution of capital imports from the West to productivity. But this cannot be a permanent source of productivity growth and a vehicle for high accumulation, for two reasons: first, the continuation of the policy depends on the ability of East-European countries to raise significantly their exports to the West of non-primary products, or their already heavy indebtedness, both prospects being difficult to envisage; second, the gradual reduction of the technological gap would reduce and eventually eliminate this source of productivity and justification of high accumulation;

3) the emergence and development of large corporations throughout Eastern Europe., usually corresponding to the horizontal integration of a production sector, sometimes vertically integrated, or locally integrated especially in the agro-industrial sectors. Thus we have the VVB and *Kombinate* in the GDR; *Wielkie Organizacje Gospodarcze*, *Kombinaty* and *Zjednoczenia* in Poland; the *Centrala* in Rumania; the *Obyedinenie* and the *Firma* in the USSR, and so on. This is a fresh compromise with centralization; it represents what elsewhere I called 'depolarization', namely delegation of powers from both the centre and the enterprises to an intermediate level (Nuti, 1979). It derives not so much from the economies of scale associated with industrial concentration, but from the necessity to ensure at the same time some delegation of tasks from the centre to lower levels, and the co-ordination of sectoral decisions and intersectoral transactions. The growth of the large corporation does not, however, solve the problems of the centralized model, because it makes the wider participation of workers in economic decision-making more difficult, and because it aggravates the accumulation bias of the system (given the growth-mindedness and the greater autonomy of large corporations). It is therefore not surprising that the trend towards the greater autonomy of large corporations is being being reversed (for instance in Poland) with a partial restoration of central control.

Thus the repetition of the political and economic cycle does not follow mechanically the same course. Beside the major contradictions described above, and the very noticeable institutional developments they generate (like the three trends just mentioned), there are subsidiary contradictions which superimpose their effects on the broader pattern of the cycle. Three such subsidiary contradictions spring immediately to mind:

1) that between the technological level of agriculture and its institutional organization. In fact the traditional neglect of investment in agriculture, following not in principle but in practice from the logic of accumulation and priority to industry and heavy industry in the original Soviet conditions, exacerbates the pressure on natural resources and has another important side-effect. Namely, under-capitalized agriculture does not lend itself to state farming using wage labour, peasant farming being a preferable institutional arrangement from the viewpoint of productivity of resources when production methods are backward. Rejecting both peasant farming and investment in agriculture has led to low productivity levels, trade dependence in the provision of food for the population and animal feed. This is responsible both for the poor provision of foodstuffs (meat, for instance) and for the conflict between imports of food and imports of machinery. In the last Five Year Plan the need for modernizing agriculture has been recognized in the USSR and elsewhere, but there is the danger that the old pattern of priorities might reassert itself;

2) the contradiction between profit and plan. For a given stock of natural and man-made resources and a given technology (i.e., in **Marxian** parlance, for a given level of development of productive forces), and a given real wage, the amount of total profit, or surplus, generated in the entire economy could be taken at best as an indication of the economic efficiency of the entire economic **system**¹⁷. The distribution of profit among enterprises operating in the economy, however, will not necessarily reflect the economic efficiency or the 'good work' of individual units. Profit is an ambiguous signal. It may indicate that workers and managers in the enterprise have above average abilities and/or work harder than average, in which case there is no reason why the product of that enterprise should be produced in larger quantities, though there may be a justification for rewarding the workers and managers of that enterprise. Or it may indicate that the production of that sector is not keeping pace with demand, and needs expanding faster, in which case there seems to be no case for rewarding the workers and managers of that enterprise. Or it may indicate that something has gone wrong elsewhere in the economy (for instance, some of the enterprise's inputs have been overproduced or underpriced, or the overall level of demand has got out of hand), in which case there is no case for either expanding the enterprise's product faster or for rewarding enterprise members. **A** similar argument can be made for losses. **Profit** at the enterprise level will be the simultaneous result of

all these forces and is therefore a poor foundation for decentralizing decisions in an economy which is still centrally co-ordinated by a visible hand. For profit to be used as an indicator of performance, a source of bonuses and of investment self-finance, as it has been envisaged at various stages in the East-European economic reforms, the scope of enterprise autonomy should be extended to the point of dismantling not only the centralized system of supply—which is still partially extant everywhere—but also the limits to intersectoral mobility in the operation of enterprises, and the constraints of investment planning itself. This antithesis between profit and plan is not one that can be solved by the search for an 'optimum' mix between the two elements of economic co-ordination; any mix being an arbitrary and unsatisfactory compromise;

3) finally, there is a contradiction between workers sharing in the distribution of bonuses geared to the performance of their enterprise, (or being damaged by a poor performance, for instance in their prospects of career and employment, as has been often the case during the economic experiments conducted in the implementation of reform), and their total lack of participation in decision-making at the enterprise level. Responsibility without power has never been a good formula for the effectiveness of a system of penalties and rewards. If, on the other hand, workers' participation in decision making was broad and effective, they would effectively turn into 'entrepreneurs', as in the Yugoslav system, with the ensuing dangers of anarcho-syndicalism.

A further source of variation in the political and economic cycle experienced by the socialist economies is the sheer quantitative change in the scale of phenomena, which sooner or later may induce qualitative change in the development process.

All these are reasons for the extremely varied morphology of the pattern of economic and political change in the socialist economies, which defies simple generalizations and predictions. They are reasons, for instance, why one should regard with some scepticism the extrapolations of fashionable econometric models of the socialist economies, no matter how detailed and refined (indeed especially if very detailed and refined), at least until the socialist economy has reached a degree of institutional stability comparable to that of the capitalist economy. On the other hand, it is precisely the variety and complexity of the socialist economies and of the continuous and often drastic changes they undertake, that makes it an interesting and worthwhile subject to study, and makes indispensable the application to those economies of the **Marxian** method of political economy.

NOTES

1. See, for instance, Hayek (1935), Lange (1937), Dobb (1969).
2. The classic **Marxian** statement of the theory of 'modes of production' is in his 'Introduction to the Critique of Political Economy' (1904, Appendix) and is developed in the *Grundrisse* as well as in other writings by Marx and Engels. See also Antonio **Labriola** (1896) and Oskar Lange (1959, Ch. 1).
3. Lucio **Colletti** argues that Marxists 'have never entertained clear ideas on this subject [of dialectical contradiction].' He distinguishes between 'real opposition' (or 'contrariety' of incompatible opposites, which is an opposition without contradiction; it does not violate the principles of identity and non-contradiction and hence is compatible with formal logic and with scientific analysis) and 'dialectical contradiction' (as opposition which is contradictory and gives rise to a dialectical opposition incompatible with scientific analysis (1975). In this paper 'contradiction' is used in the sense of Colletti's 'real opposition'; Colletti's claim that for Marx the contradictions of capitalism are not 'real oppositions' but 'dialectical contradictions in the full sense of the word' rests only on flimsy references to **Marx's** crisis theory and is not at all substantiated; the confusion seems to be entirely of Colletti's making.
4. 'Under socialism, the character of the interplay of the productive forces and productive relations is altered. Production relations are brought into line with the level and character of today's productive forces ...' (Kozlov, 1977 p. 87). See also D. M. **Nuti**, 1973. The applicability of the law of value and of the law of faster growth of the production of means of production have been debated at various stages in Soviet and East-European countries as a way of airing changing views about the scope and role of markets and about accumulation policy, in particular in the early sixties. Priority to means of production came under serious criticism in Poland under the influence of the Kalecki school (Kalecki, 1969); Polish texts on the political economy of socialism stress the relativity of this priority principle (see **Nuti**, 1973) which however is still a basic tenet of Soviet texts (See Kozlov, 1977). A refreshing exception among Eastern European texts is Brus (1967), a Polish text now out of circulation in which 'the fundamental task of the political economy of socialism is to uncover economic conflicts and indicate the general direction of their solution', the orthodox 'laws' are criticized and alternative models of organization of the socialist economy are related to the specific economic conditions which make them viable (See **Nuti**, *cit.*).
5. For a general criticism of Marxist-inspired criticisms of Soviet-type societies see Lane, 1977, 1978; for specific criticism of the International Socialist position see Purdya, 1978; for a critique of the Maoist approach see Miliband, 1975.

6. Many of these arguments apply also to the view that Soviet society partakes so much of the features of industrial societies in general as to be assimilated to these societies for analytical purposes. (See Giddens, 1973).
 'Marx himself even toyed with the idea that in Russia it might be possible for capitalist development to be largely, if not entirely, by-passed, and the transition to socialism occur on the heels of a purely bourgeois-democratic revolution which had the peasantry as its main driving force' (Dobb, 1967).
8. In **Marx's** approach to pre-capitalist economic formations the Asiatic mode of **production**, or oriental despotism, is characterized by autocracy and centralization of economic power in the hands of the state (with state ownership of the land) the *raison d'être* of which is the undertaking of public works on a vast scale, especially in agriculture. (Marx, 1964). Mam refers to a specific Slavonic version of this mode of production, based on direct communal property (Ibidem, p. 97; see also **Marx's** letter to Vera Zasulich, 8 March 1881, Ibidem, pp. 142-5). For a good discussion of the 'Asiatic' features of Russian society and their impact on subsequent developments under Socialism see Bahro, 1978, Ch. 3, 'From Agricultural to Industrial Despotism'.
 'The principles of the New Economic Policy had been worked out by Lenin still in the spring of 1918, but their implementation was interrupted by intervention. Only after three years was it possible for the Soviet power to proclaim this policy again, and to put it consistently into practice' (Politicheskaya ekonomiya, Uchebnik, Moscow 1954, pp. 330-1, quoted by Szamuely, 1974, p. 74). The **latest** Soviet handbook of political economy of socialism devotes seven **lines** in all to War Communism, dismissed as 'being only necessitated by war and dislocation' (**Kozlov**, 1977, p. 37).
10. See, for instance, Timofiejuk (1968): '... socialist economies **are** switching from extensive growth (based mostly on increases of employment and investment) to the intensive stage of growth (based **mostly** on labour productivity and the effectiveness of investment). This transition demands fundamental **changes** in the methods of planning administration and the management of the national economy' (p. 124-5).
11. The Chinese model is an equally questionable model for advanced industrial countries. Also, recent changes in the Chinese **economy** suggest that the Maoist model may have been a short cut to the Soviet model rather than a genuine alternative.
12. In the 1959 official Soviet textbook of Political Economy *Khozraschet* was defined as 'a method of planned operation of socialist enterprises which requires the carrying out of state determined tasks with the maximum economy of resources, the covering of money expenditure of enterprises by their own money revenues, the ensuring of profitability of enterprises'.
13. An **illusion** of scientific precision has been provided by aggregate econometric analysis, of a kind which has been discredited and is

going out of fashion in the West. Thus Nachtigal (1967), for instance, claims that in Czechoslovakia in the decade 1951-60 productivity growth contributed over one-third of total income growth, whereas in the years 1961-4 productivity made a *negative* contribution equal to -133.2 *per cent* of total income growth while the increase in **material-intensity** of production (which in the decade 1951-60 had passed from small **positive** to small but increasing negative contributions to growth) in the years 1961-4 made a further negative contribution equal to -87.5 per cent of total income growth; 'extensive sources', *i.e.*, factor increases are alleged to have contributed from 55 to 85 per cent of total income growth in various periods of the fifties, and 320.7 per cent (sic) of total income growth in the years 1961-4. This is a **pseudo-exact** and mystifying way of simply saying that in the early sixties income growth declined (indeed became negative in 1963) in spite of the continued accumulation effort; this **throws** no light on the causes of the decline because any quantitative assessment of relative weight of growth factors depends crucially on perfectly arbitrary assumptions about substitutability in production and/or about the speed and nature of technological change. This has not prevented Western observers from undertaking similar exercises allegedly providing the increasing weight of 'extensive sources of growth' in the Soviet Union and Eastern Europe during the fifties and early sixties (see for instance Boretsky, 1966), leading to predictions of declining growth performance (such as Weitzman, 1970, and Desai, 1976), for the Soviet economy). Under alternative assumptions, and by means of more sophisticated econometrics, Gomulka (1976, 1977a) reaches different and less pessimistic conclusions. For an excellent survey of 'sovietological econometrics' see Gomulka (1977b).

14. See for instance Wilcvnski (1972) whose book on socialist economic development and reforms bears the subtitle 'From Extensive to Intensive Growth under Central Planning in the USSR, Eastern Europe and Yugoslavia'.
15. The political centralization that followed the launching of NEP seems an exception (see above, section 4). This was probably due to external threat, rather than to internal developments; also, the ban on factions **was** not actually exercised until later. The qualification that, *beyond a certain point*, the progress of economic decentralization *can* bring about political centralization to offset involutory dangers does not alter significantly the *nature* of the argument, though it causes a greater instability of the system.
16. This limit to the advisability of further accumulation corresponds to what is known in conventional economic literature as the 'golden rule' of accumulation, stating that in a steady state the level of permanently maintainable consumption per head is maximized when the economic system grows at a rate equal to the profit rate. In general, this has very limited implications because a higher growth rate than the 'golden rule' suggests would reduce consumption in the medium run but could raise it later on over and above what it would have been without

additional accumulation and growth. In the case of a socialist economy, however, the transfer of consumption from present to future generations beyond the permanently maintainable level of consumption is rather hard to justify. Hence the 'golden rule' can be interpreted as a limit to accumulation.

17. This proposition implies a rather long list of assumptions, ranging from the absence of external effects to the acceptability of the price system for the evaluation of profits; the proposition is put forward for the sake of argument, to emphasize the distinction between the macro- and micro-economic significance of a profit indicator.

REFERENCES

- Amann R., Cooper J., Davies R. W., *The Technological Level of Soviet Industry*, Yale University Press, New Haven and London, 1977.
- Bahro, R., 'The Alternative in Eastern Europe', *New Left Review*, November-December 1977, no. 106.
- Bahro, R., *The Alternative in Eastern Europe*, New Left Books, London, 1978, originally published as *Die Alternative: zur Kritik des realexistierenden Sozialismus*, Europäische Verlagsanstalt, 1977.
- Baran, P. A., Sweezy, P. M., *Monopoly Capital*, Monthly Review Press, New York and London, 1966.
- Barsov, A. A., 'Sel'skoe khoziaistvo i istochniki sotsialisticheskogo nakopleniia v gody pervoi piatiletki (1928-1933)', *Istoriia SSSR*, 1968, no. 3.
- Barsov, A. A., *Balans стоимостных обменов между городом и деревней*, Moscow, 1969.
- Bergson, A., *The Real National Income of Soviet Russia Since 1928*, Cambridge, Mass., 1961.
- Bettelheim, C., *Les luttes de classe en URSS, 1917-1923*, Maspéro-Seuil, 1974.
- Bettelheim, C., Sweezy P. M., *On the Transition to Socialism*, 2nd edition, 1971.
- Boretsky, M., 'Comparative Progress in Technology, Productivity and Economic Efficiency: USSR versus USA'; in: US Congress, 1966.
- Brus, W., *Ogolne problemy funkcjonowania gospodarki socjalistycznej*, PWE, Warsaw 1964, translated into English under the title: *The Market in a Socialist Economy*, Routledge and Kegan Paul, London, 1972.
- Brus, W., (Ed.), *Ekonomia Polityczna Socjalizmu*, 3rd edition, Warsaw, 1967.
- Brus, W., *The Economics and Politics of Socialism - Collected Essays*, with a foreword by Maurice Dobb, Routledge and Kegan Paul, London, 1973.
- Brus, W., *Socialist Ownership and Political Systems*, Routledge and Kegan Paul, London, 1975.
- Carr, E. H., *The Bolshevik Revolution, 1917-23*, Vol. 2, Macmillan, 1952; Vol. 3, Macmillan, 1953, London.
- Carr, E. H. *The Interregnum 1923-24*, Macmillan, London, 1954.
- Carr, E. H., *Socialism in One Country, 1924-26*, Vol. 1, Macmillan, 1958, Vol. 2, Macmillan, 1959, London.

- Carr, E.H., R.W. Davies**, *Foundations of a Planned Economy, 1926-29*, Macmillan, London, 1969.
- Chayanov, *The Theory of Peasant Economy*, English translation, 1966, originally published in 1926.
- Cliff, T., *Russia—A Marxist Analysis*, IS books, 1964, reprinted as *State Capitalism in Russia*, Pluto Press, 1974.
- Colletti, L., 'Marxism and the Dialectic', *New Left Review*, no. 93, September-October 1975.
- Cooper J. M., Davies R. W., Wheatcroft S. G., 'Contradictions in Soviet Industrialisation', *mimeo*, Centre for Russian and East European Studies, Birmingham, 1977.
- Desai, P., 'The Production Function and Technical Change in Postwar Soviet Industry: a Reexamination', *American Economic Review*, Vol. 66, no. 3, 1976.
- Deutscher, I., *The Prophet Armed, Trotsky: 1879-1921*, Oxford University Press, 1954.
- Deutscher, I., *Stalin*, London, 1961.
- Deutscher, I., *The Unfinished Revolution*, London, 1967.
- Deutscher, I., *Russia after Stalin* (with a new introduction by M. Liebman), London, 1969.
- Dobb, M. H., *An Essay on Economic Growth and Planning*, Routledge, London, 1960.
- Dobb, M. H., 'The Discussions of the Twenties on Planning and Economic Growth', *Soviet Studies*, October 1965.
- Dobb, M. H., *Soviet Economic Development Since 1917*, London, 1966.
- Dobb, M. H., 'The Discussions of the 1920s about Building Socialism', *Annali dell'Istituto Giangiacomo Feltrinelli*, Milan, 1967.
- Dobb, M. H., *Welfare Economics and the Economics of Socialism: Towards a Commonsense Critique*, Cambridge University Press, London, 1969.
- Dohan, M. R., 'The Economic Origins of Soviet Autarky, 1927/8-1934', *Slavic Review*, Vol. 35, no. 4, December 1976.
- Domar, E. D., *Essays in the theory of economic growth*, New York, 1957.
- Ellman, M., Planning problems in the USSR: the contribution of mathematical economics to their solution, 1960-71, London, Cambridge University Press, 1973.
- Ellman, M., 'Did the Agricultural Surplus Provide the Resources for the Increase in Investment in the USSR during the First Five Year Plan?' *Economic Journal*, December 1975.
- Ellman, M., 'Seven Theses on Kosyginism', *De Economist*, no. 1, 1977.
- Erlich, A., *The Soviet Industrialisation Debate, 1924-28*, Cambridge, Mass., 1960.
- Fallenbuchl, Z. M., (Ed.) *Economic Development in the Soviet Union and Eastern Europe*, Praeger, 1976.
- Giddens, A., *The Class Structure of the Advanced Societies*, Hutchinson, London, 1973.
- Gomulka, S., 'Soviet Postwar Industrial Growth, Capital-Labour Substitution, and Technical Change: a Reexamination', in Fallenbuchl (Ed.), 1976.

- Gomulka, S., 'Slowdown in Soviet Industrial Growth 1947-1975 Reconsidered', *European Economic Review*, 10, no. 1, 1977a.
- Gomulka, S., 'Notes on the New Sovietological Econometrics' (mimeo.), Whitehall/Academics Conference, LSE, December 1977b.
- Gomulka, S., 'Growth and the Import of Technology: Poland 1971-80', *Cambridge Journal of Economics*, March 1978.
- Goodwin, R., 'A Growth Cycle', in Feinstein, C. (Ed.), *Capitalism, Socialism and Economic Growth, Essays in Honour of M. H. Dobb*, Cambridge University Press, London, 1967.
- Harman, C., *Bureaucracy and Revolution in Eastern Europe*, Pluto Press, 1975.
- Hayek, F. A. (Ed.), *Collectivistic Economic Planning*, London, Routledge, 1935.
- Hicks, J., Growth and Anti-Growth, *Oxford Economic Papers*, November 1966.
- Hunter, H., 'The Overambitious First Soviet Five Year Plan', *Slavic Review* no. 2, June 1973, Vol. 32.
- Kalecki, M., 'Political Aspects of Full Employment', *Political Quarterly*, 1943.
- Kalecki, M., *Introduction to the Theory of Growth in a Socialist Economy*, Blackwell, London, 1969.
- Kozlov, G. A., (Ed.), *Political Economy: Socialism*, Progress Publishers, Moscow, 1977.
- Kuron, J., Modzelewski, K., *An Open Letter to the Party*, London, 1968.
- Labriola, A., *Del materialismo storico, dilucidazioni preliminari*, E. Loescher, Rome, 1896.
- Lane, D., *The Socialist Industrial State — Towards a Political Sociology of State Socialism*, Allen and Unwin, London, 1976.
- Lane, D. S., 'Marxist Class Conflict Analyses of State Socialist Society', in Scase, 1977.
- Lane, D. S., *Politics and Society in the USSR*, 2nd edition, Martin Robertson, London, 1978.
- Lane, D. S., O'Dell, F., *The Soviet Industrial Worker — Social Class, Education and Control*, Martin Robertson, London, 1978.
- Lange, O., 'On the Economic Theory of Socialism', *Review of Economic Studies*, 1937.
- Lange, O., *Political Economy*, Vol. 1, PWN-Pergamon Press, Warsaw-London 1963, originally published in Polish in 1959.
- Lange, O., 'The Computer and the Market', in Feinstein, C., *Capitalism, Socialism and Economic Growth: Essays in Honour of M. H. Dobb*, Cambridge University Press, London, 1967.
- Lewin, M., 'The Disappearance of Planning in the Plan', *Slavic Review*, Vol. 32, no. 2, June 1973.
- Luxemburg, Rosa, *What is Economics?*; Pioneer Publishers, New York, 1954.
- Mandel, E., *Marxist Economic Theory*, Merlin Press, 1968.
- Mandel, E., 'Ten Theses on the Social and Economic Laws Governing the Society Transitional between Capitalism and Socialism', *Critique*, no. 3, Autumn 1974.
- Marx, K., 'Introduction to the Critique of Political Economy', an Appendix to *A Contribution to the Critique of Political Economy*, Kerr & Co., 1904.

- Marx, K., *Grundrisse: Foundations of the Critique of Political Economy* (rough draft), Penguin, 1973.
- Miliband, R., 'Bettelheim and Soviet Experience', *New Left Review*, no. 91, May-June 1975.
- Millar, J. R., 'Mass Collectivisation and the Contribution of Soviet Agriculture to the First Five Year Plan', *Slavic Review*, Vol. 33, no. 4, December 1974.
- Nachtigal, V., 'Extensivity and Efficiency of Economic Growth in Czechoslovakia', *Czechoslovak Economic Papers*, Prague, no. 9, 1967.
- Nove, A., *An Economic History of the USSR*, Penguin, 1969.
- Nove, A., Nuti, D. M., *Socialist Economics*, Penguin, 1972.
- Nuti, D. M., 'The Political Economy of Socialism—Orthodoxy and Change in Polish Texts', *Soviet Studies*, October 1973, Vol. XXV, no. 2.
- Nuti, D. M., 'Large Corporations and the Reform of Polish Industry', *Jahrbuch der Wirtschaft Osteuropas*, Vol. 7, Munich, 1977.
- Nuti, D. M., 'Investment, Interest and Degree of Centralisation in Maurice Dobb's Theory of the Socialist Economy', *Cambridge Journal of Economics*, no. 2, 1978.
- Nutter, G. W., Bornstein I., Kaufman, A., *Growth of Industrial Production in the Soviet Union*, Princeton, 1962.
- Preobazhensky, E., *The New Economics*, with an introduction by A. Nove, Oxford 1965.
- Purdy, D., *The Soviet Union: State Capitalist or Socialist? A Marxian Critique & the International Socialists*, the Communist Party, London, 1978.
- Rowthorn, R. E., 'A Conflict Theory of Inflation', *Cambridge Journal of Economics*, no. 2, 1977.
- Sartre, J. P., 'Socialism in One Country', *New Left Review*, no. 100, November 1976-January 1977.
- Scase, R., (Ed.), *Industrial Society: Class Cleavage and Control*, Allen and Unwin, London, 1977.
- Spulber, N., (Ed.), *Foundations of Soviet Strategy for Economic Growth: Selected Soviet Essays, 1924-30*, Bloomington, 1964.
- Staniszkis, J., 'On Some Contradictions of Socialist Society: the Case of Poland', *Soviet Studies*, Vo. XXXI, no. 2, April 1979.
- Szamuely, László, *First Models of the Socialist Economic Systems — Principles and Theories*, Akadémiai Kiadó, Budapest, 1974.
- Timofiejuk, I., *Mierniki wzrostu gospodarczego*, PWE, Warsaw, 1968.
- Treml, V. G., Hardt, J. P., (Eds.), *Soviet Economic Statistics*, Durham, North Carolina, 1972.
- Trotsky, L., *The Revolution Betrayed*, 1937.
- United Nations-ECE, *Economic Survey of Europe 1965*, Part II, Geneva, 1967.
- United Nations-ECE, *Economic Survey of Europe in 1976*, Part II, Geneva, 1976.
- US Congress, Joint Economic Committee, *New Directions in the Soviet Economy*, Washington GPO, 1966.
- Weitzman, M., 'Soviet Postwar Economic Growth and Capital-Labour Substitution', *American Economic Review*, Vol. 60, no. 4, 1970.
- Wilcznski, J., *Socialist Economic Development and Reforms*, London, 1972.