TROTSKYIST BULLETIN

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PLAN VERSUS MARKET

Economics and politics in the transition from capitalism to communism

BMCAdam

Plan versus Market

Economics and politics in the transition from capitalism to communism

"We know the fundamental law of history—in the end that regime will conquer which ensures human society a higher economic standard." (Leon Trotsky)

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Preface

This pamphlet represents the collective work of the LRCI over the last two years on a subject of vital importance. Notwithstanding the blindingly obvious deficiencies of the operation of the free market from the African continent to the urban ghettos of the USA, the left is in ideological retreat over the economic case for socialism.

The collapse of the Stalinist ruled states since 1989 has been felt as a catastrophic defeat not only by those who saw in them, "really existing socialism" but also by the many more activists who, whilst opposing the political regime, consoled themselves that the economic power of the Soviet Union proved the superiority of state economic planning.

With the reality of economic decline and eventual paralysis now so clearly revealed, disillusion has led many to turn their backs on the entire notion of economic planning.

In addition, socialism's critics point to the failure of public ownership and nationalisation to prevent inflation and mass unemployment in capitalist societies. Many militants in the international labour movement and the new generation of youth are influenced by these arguments. Those seeking to replace capitalism with some form of socialist society have been placed on the defensive—politically and ideologically.

Day after day the official propaganda insists that all those that seek to replace capitalism are advocating an economic order that is doomed to authoritarianism, gross inefficiency and narrowing of choice. An overwhelming consensus on the reformist and centrist left has accepted the core of this argument and has responded by adopting various forms of "market socialism" which in turn concedes the essence of the critique of socialism mounted by the advocates of the unrestricted free market.

Thankfully, among those who suffer the consequences of the laws of market, the propaganda machine only has limited effect. For an increasing number, the intrinsic merits of the market over rational economic planning are not at all easy to recognise. In Britain—despite 17 years of Tory free market dogma—there are growing signs that the mass of the population are sceptical of the logic of the market.

In a survey published in the *The Guardian* in September 1996, respondents were asked whether they agreed or disagreed with the statement that "more socialist planning would be the best way to solve Britain's economic problems". A clear majority of those expressing an opinion, 43%, said yes, five percent up on 1991.

The most powerful of bourgeois propaganda machines can break down in the face of job insecurity, mass youth unemployment, low wages and negative housing equity. The argument, then, can be won. But an instinctive understanding that there must be an alternative to market madness is not enough.

The revolutionary minority has a responsibility to assemble the vanguard around a clear, coherent and scientific exposition of the political economy of socialism, not as an idealistic "blueprint" fabricated out of our imagination but as it arises out of the dialectical negation of the dominant trends within modern capitalism. In developing this, it is necessary to integrate the real lessons, positive and negative, theoretical and programmatic, to be drawn from the history of the workers' states with a bureaucractic ruling caste.

This pamphlet draws together the essential components of such a revolutionary conception of economic planning. Beginning with a brief summary of the legacy of Marx and Engels and the limited elaboration of their ideas by the theorists of the Second International, it then deals with the experience of the young soviet state (USSR).

The first ten years of that state were rich in both practical and theoretical work, from the initial assumptions of development by means of "workers' control", through the often utopian schemes of the War Communist period, to the great industrialisation debates of the New Economic Policy, we draw out the lasting theoretical advances encapsulated in the concept of the "transitional period" between the seizure of power and the establishment of the "socialist" or lower stage of communism.

This section ends by codifying the political-economic consequences of that transition being blocked by the political counter-revolution carried through by the Stalinist bureaucracy, including not only the resulting pattern of hypertrophied heavy industry, restricted access to consumer goods, stagnant agriculture and alienated workforce but also the pro-market attempts to revivify these doomed systems.

The second substantial element of this work consists of a critique both of the open and concealed opponents of planned economy. We unpick the arguments of the key representatives in the inter-war debate about the rationality of socialism—von Mises and Hayek versus Lange and Taylor, proving the abstract and a-historic method of the former and the non-Marxist and technocratic vision of socialism of the latter. The views of more contemporary writers such as Alec Nove, Ota Sik and Ernest Mandel are also presented and criticised.

The last part of the pamphlet gives a positive exposition—as far as such a thing is possible—of the main features of the transition to socialism, at least in the industrially developed capitalist economies.

Any healthy revolutionary workers' state will be guided in this as much by liberating whatever is rational in the methods and techniques of capitalism from the social relations within which they are trapped, as by theoretical precepts and lessons drawn from the experiences of the USSR and other degenerate workers' states.

Naturally, this work is guided throughout by the intellectual and political tradition founded by Leon Trotsky and the International Left Opposition in the 1920s and 1930s. The Left Opposition had in its ranks the most able 1920s economist of Russian Bolshevism in E. Preobrazhensky, whose writings on the law of value and its residual effects in the

transition to socialism were codified in his theory of primitive socialist accumulation.

Trotsky, whose writings on political economy were on the whole less theoretical in scope and more policy oriented, were no less perceptive—equally compelling in their indictment of Stalinist command planning and in their defence of the need for a democratic non-market driven socialism.

Finally, a word on the form of presentation adopted for this work. This pamphlet started life as a set of theses, summarising and crystallising the arguments and conclusions of research and debate undertaken by the LRCI. By their very nature, theses are stripped of the many source references, facts, figures and quotations that go to illustrate the argument.

However, such an exposition has the merit that it allows the key arguments for and against planning and the market to stand out.

This pamphlet does not signal the end of the LRCI's work on the subject. It is a contribution to a debate which will play a vital part in identifying and re-assembling the forces of all those committed to the revolutionary overthrow of capitalism.

As such it is a central part of the LRCI's raison d'etre of identifying and codifying the defining features of revolutionary marxism for the new millenium. It is in the spirit of advancing that task that we present this summary of our work to date for discussion, debate and polemic to the international socialist and labour movement.

Introduction

Capitalism long ago lost its generally progressive character because the social costs that have to be borne for continued economic development far outweigh the benefits. Absolute poverty has grown enormously within all the capitalist economies during the last quarter century. Over one billion people live below subsistence level; in excess of 100,000 children die of malnutrition and other poverty related diseases each week.

While capitalism continues to revolutionise technique it can only do so at the expense of productive employment. Tens of millions are made redundant from the land in the quest for productivity while capitalist industry and commerce cannot find employment for them elsewhere. Expelled from the labour force or denied ever entering it, capitalism is less and less capable of compensating those it marginalises; the search for profits comes into increasing conflict with the maintenance of public spending on health, education and unemployment.

Social inequality has widened as the free market has let rip. A minority has prospered by helping itself to undervalued state assets, by more ruthless exploitation of previously protected resources, by depression of wage levels, or by generous tax cuts.

More and more workers find their conditions of labour intolerable. In parts of the world capitalism still cannot survive without bonded labour. Elsewhere, millions are deprived of labour rights and forced to work longer or unsocial hours. Millions more have had security of contract removed or undermined. Millions more again are trained for jobs that simply do not exist and are pressed into others out of desperation; in short, millions are alienated from their labour.

Alongside this waste of human creative power, capitalism continues to squander precious economic resources. In the search for competitive advantage, modern machinery is scrapped while it still has on average around half its useful life ahead of it. Modern corporations waste billions duplicating research.

Even larger sums are spent in unproductive expenditures; hundreds of billions of dollars annually are wasted in order to protect the capitalist class from its own working class—whether in sealing itself off from the effects of the urban nightmares it has created, or by arming and training its servants of repression. More again is spent in protecting rival capitalist classes from the claims and counter claims made upon each other.

Capitalist competition drives rival bosses to the expense of persuading workers of the subtle differences between products they do not need. The endless clamour for fashion-driven ephemera while the basic needs of tens of millions for housing and food go unmet for lack of "effective demand" provides a resounding refutation of the market ideologues' boast that the market provides for the maximum satisfaction of the maximum number.

These are all products of the operation of the capitalist market. Yet, despite all the evidence, the hired apologists of the market still insist that this market guarantees the optimal allocation of resources, the equality of participants in exchange, freedom of choice and just rewards of the factors of production. When these arguments fail, they shrug their shoulders and insist that at any rate the market is an eternal or natural form of regulating human economic activity; whatever its defects, the market, it seems, is the only game in town.

Regardless of what the bosses' ideologues claim, the market was not a spontaneous creation of blind economic laws; neither is it an ahistorical institution as old as human history itself. Rather, the capitalist market emerged in Europe in the sixteenth century as a qualitative extension of the simple commodity mode of production that had existed as a subordinate part within all class societies.

Specifically, it was the creation of a market in labour power that transformed simple commodity production into generalised commodity production. This market in human labour power required political, above all state, intervention to break up traditional patterns of economic activity and destroy existing ties binding labourers to the means of production and to the land.

Alternative or supplementary sources of income, other than the sale of labour power, had to be forcibly denied to the mass of direct producers in this transition to capitalism. Nor was this a once and for all act in the dim and distant past of Europe. It has been reproduced time and again on an ever more brutal and larger scale wherever imperialism conquered colonies and transplanted capitalism and its necessary social and property relations.

Once forcibly established, the laws of the market became eternalised in the minds of those subject to them. The main task of bourgeois political economy after the 1840s was to prove the natural, inherent superiority and unchallengeability of these laws. Karl Marx, however, scientifically revealed the real mode of operation of the laws of the market, in his re-elaboration of the classical labour theory of value.

He demonstrated that, alongside the realm of equality of commodity owners in the market place, there exists the despotic rule of commodity owners over workers in the factory. The purchase of labour power is but the first step to the ruthless exploitation of its use value and the extraction of the surplus generated by this ruthless enjoyment. Misery, degradation and alienation all flow from the fact of commodity ownership once labour power itself becomes a commodity. Hence, the generalisation of the market brings forth wage slavery.

Under capitalism, the allocation of economic resources, including human labour, is regulated by the law of value: that is, the generalised exchange of all commodities according to the quantity of socially necessary labour time worked up in them. This law applies to the value of labour power itself.

Indeed, it is only because of this that the law of value can regulate the functioning of the national economy as a whole, since the determination of the value of commodities depends upon a socially average price being given to the labour worked up into them, something that was impossible before capitalism.

The law of value, then, regulates the production of goods and services and the modes of distribution and exchange that arise upon production. However, it does this blindly, as a *post festum* result of the competing and clashing operations of many autonomous and private owners of capital. Which products are socially useful emerges only as a result of a blind process that generates much waste, anarchy and overproduction.

In its time, the bloody triumph of the market, despite the suffering imposed, was historically progressive in that it paved the way for the triumph of the capitalist mode of production over all previous or parallel modes of production. Once victorious, the market revolutionised economic life, and gave a tremendous and unprecedented boost to the productivity of human labour. It established, in turn, national markets, international trade and finally a global economy.

Inevitably, the market has undergone various expansions and modifications over the last 250 years. Early forms of protection (mercantilism) gave way to a system of greater free trade in industry and commerce.

Yet, as free competition promoted the concentration of capital it removed or narrowed competitive markets and spawned monopolies that restricted the operation of the law of value.

The growth of monopoly in the twentieth century served to slow down accumulation as enterprises opted to preserve the value of their assets rather than see them devalued by the introduction of new investments. So the pursuit of profit maximisation acted as a break on innovation and productivity. Slump, depression, mass unemployment followed as factors of production and labour could not be employed.

Capitalism was only rescued from its self-inflicted malaise by war and the enforced destruction and devaluation of capital that it entailed. Overseeing this process, the state itself took responsibility for directing and even undertaking large parts of capital accumulation. The guarantee of markets and profits as a result of the creeping socialisation of production and distribution was itself a damning indictment of the failure of the market under capitalism.

However, this response to the crisis engendered by monopoly went on to create problems of its own. Full employment and rising wages, alongside the declining productivity of public investments, depressed profits and, with them, further accumulation. The last 25 years have seen an intensive reversion to free competition, not in place of monopolies but between and alongside them.

Removal of trade barriers, deregulation of the labour market, abolition of capital controls, privatisation (and devaluation) of state held assets, all these have been aimed at boosting accumulation and productivity. And with what results for the mass of the population? An unprecedented growth in social inequality, absolute poverty and mass unemployment.

Each of these phases of capitalist development has been a response to the crises generated in the previous phase. The Marxist critique of the market does not originate in an abstract humanist desire for equality, but rather from the recognition that capitalism generates social crises that can only be ended by the abolition of the market economy.

Crises occur inevitably and regularly because of the contradiction that exists between the increasingly social form of production and the private character of appropriation. Neither any group of capitalists nor any government can forestall such crises indefinitely, since their function is to resolve the systematic disproportions and overproductions that are generated by the operation of the market. Production and consumption, increasingly out of harmony with each other as a result of the spontaneous operation of "market forces", are forcibly and repeatedly brought back into line through the destruction of products for which no buyer can be found despite the fact that many of these commodities are needed.

Beneath the particular features of specific crises within capitalism, lies the the tendency of the rate of profit to fall. This has its origins in the relationship between the, generally rising, organic composition of capital and the, generally declining, rate of extraction of surplus value. Its ultimate consequence is that at some point new investment is witheld by capitalists because they see no prospect of acceptable rates of return.

Thus, private ownership and pursuit of profit leads to reductions, even cessation, of production in the particular sector. The bigger the capital formation involved, the more disastrous is its impact on social production as a whole. Similarly, transfers of investment from one sector to another, again in search of maximum profits, leads to disproportionalities between the different sectors of the economy as a whole. Hence, only a rough and temporary equilibrium between production and consumption can result under capitalism.

In its many attempts to stave off the effects of crisis, capitalism has always been forced to limit or even partially overthrow the operation of the law of value; in this regard it anticipates and mimics socialism.

It prepares the working class for the tasks of socialist transition. It has created a working class numerous and educated enough to take over the functions of management in production for itself.

It has created techniques of market regulation and manipulation that can be taken over and extended. It has created planning instruments—partially applied and incapable of lasting effect while private property owners predominate—by which capitalism seeks to minimise the wasteful consequences of anarchy in production. These then foretell the end of market domination over economic life.

However, just as the market did not arise peacefully but had to smash aside obstacles in its way, so the end of the market in regulating economic life will neither be peaceful nor instantaneous. A forcible overthrow of the state that protects and guarantees this market is an essential first step which allows the expropriation of the wealth and capital of the minority, placing it in the hands of society.

The eradication of the market as an economic mechanism, however, will not be immediate. While its tyranny over the mass of direct producers can be ended quickly, the market cannot simply be abolished. Like the state itself, the market must wither away.

Scarcity will continue and the distribution of scarce resources may well be done, at least in part, through sales on the market. But the market will have to be manipulated as it becomes a declining factor in economic life; it must be forced to serve the cause of its own abolition. This is the aim of the transition period.

The legacy of Marx and Engels

Marx and Engels wrote no separate work about the political economy of socialism. Their thoughts are scattered throughout various theoretical, programmatic and polemical books. Nevertheless, taken together these laid out the basic concepts that have since guided the revolutionary movement.

First, Marx and Engels insisted that the coming socialist society must take its point of departure from the advances registered by modern industry, modern technique and the division of labour.

Socialism would build upon the centralisation of industry and the embryos of socialised ownership of the means of production present within capitalist society (e.g. joint-stock companies, co-operatives). In this sense they opposed all schemes which implied a regression in technique or social organisation from what had been reached under modern capitalism.

Marx and Engels' positive remarks on socialism and communism naturally began from a recognition that post-revolutionary society would consciously set about resolving the contradictions which underlay the inherent defects of capitalist production and distribution. The most general contradiction under capitalism was between the increasingly social character of production and the private character of the appropriation of the surplus product. This contradiction was inherent within the nature of commodity production:

"What are commodities? Products made in a society of more or less separate private producers, and therefore in the first place private products. These private products, however, become commodities only when they are made, not for consumption by their producers, but for consumption for others, that is for social consumption; they turn into social consumption through exchange."(F Engels, *Anti-Dühring*, Moscow 1977, p371)

Products are made without prior knowledge as to whether there is a market for them. Therefore, whether or not the labour involved in their production is socially useful can only be known after they have been brought to market. This simple characteristic of all commodity production, within capitalism or not, ensures the anarchy of production since it cannot be guaranteed that every use-value produced will find a buyer for whom it is useful. Ongoing overproduction and disequilibrium occurs and with it waste and inefficiency.

However, capitalism, which is generalised commodity production (i.e. labour power itself is a commodity, not just the instruments of labour and raw materials) adds another dimension. Production is undertaken in bigger co-operative working units in which a class of capitalists owns a large volume of means of production and employs a class of labourers who own nothing except their capacity to labour.

The capitalist owns the capital that is used to employ the worker and thereby obtains the right to the product of the worker. This product, however, contains more value than the capitalist has had to lay out in the form of machinery, raw materials and labour power.

This is because the act of labouring creates more value than labour power itself is worth. As a result the capitalist appropriates surplus value. Appropriating more and more surplus value becomes the driving aim of the capitalist. This leads to conflict between the two classes over the production and distribution of surplus value.

Moreover, in the search for greater productivity more and more machinery is set in motion by fewer and fewer workers, leading to structural mass unemployment and, therefore, constant under-utilisation of labour—society's most important resource.

Further waste is caused by the class war itself, with its inevitable dissipation of the energy and invention of the working class. Since work is oppressive it ceases to be an essential part of the development of human individuality and a further waste of the productive capacity of society results.

Although the labour process under capitalism becomes ever more complex and the division of labour ever more sophisticated, it is still private capital that organises production. Production under capitalism, therefore, remains essentially private production, although production intended for social use. The private form of capitalist production stands in antagonistic contradiction to its social content. And the same is true for labour; although much labour seems to be a social activity in big capitalist firms and even trusts, wage labour under capitalism remains private labour for two reasons.

First, because it is a function of private capital and not of society; secondly, because the labourer is alienated from (and, therefore, essentially indifferent to) the social content of his/her work. To what extent the labour privately expended represents social labour is only decided after the market has revealed the respective prices for all commodities and whether the commodities can be sold at those prices. The circulation process translates a certain amount of concrete (private) labour into a different amount of abstract (social) labour. The terms of translation cannot be known in advance. Under capitalism, labour is, in the best case, indirectly socialised, in the worst, not at all.

The survival of all individual capitals depends on the extent to which their materialised concrete labour (their commodities) really represents abstract labour, and this depends in the last analysis on the productivity of their capital. To survive, every capital is forced constantly to accumulate, because only accumulation can secure a constant increase in productivity. This, in the end, means that the worker, the representative of living labour, is systematically subordinated to accumulation, i.e. to dead labour.

Capitalist accumulation serves no other goal than that of accumulation. It is a quasi-automatic process, independent of human will. It is this monstrous character of capitalism that the working class has to overcome in order to rescue mankind and the planet earth. Marx's analysis of capitalism makes it unambiguously clear that it is the private form of production and labour, the indirectness (i.e. the blindness) of

the socialisation of labour, that encapsulates the whole scandal of capitalism: the dictatorship of capital over the worker.

Marx and Engels considered that these defects in generalised commodity production could be overcome if labour became directly social:

"From the moment when society enters into possession of the means of production and uses them in direct association for production, the labour of each individual, however varied its specifically useful character may be, becomes at the start and directly social labour. The quantity of social labour contained in a product need not then be established in a roundabout way; daily experience shows in a direct way how much of it is required on the average . . . it will still be necessary for society to know how much labour each article of consumption requires for its production. It will have to arrange its plan of production in accordance with its means of production, which include in particular its labour power. The useful effects of the various articles of consumption, compared with one another and with the quantities of labour required for their production, will in the end determine the plan." (*ibid*, p374/375)

The plan is a conscious instrument employed by society to "establish a relation between the volume of social labour-time applied in producing definite articles, and the volume of social want to be satisfied by these articles." Production is regulated by the changing structure and expansion of needs. From this conception further consequences follow. First of all, products cease to take the form of commodities since they are no longer exchange values, that is goods and services whose socially necessary labour is determined only in the act of exchange itself. Rather, this decision is taken *ex ante*, goods are produced because there is a social need for them. Secondly, money loses its specific character as a universal equivalent of all exchange value. Instead:

"Society can simply calculate how many hours of labour are contained in a steam engine, a bushel of wheat at the last harvest, or a hundred square yards of cloth of a certain quality. It could therefore never occur to it still to express the quantities which it will then know directly and in their absolute amounts, in a third product, in a measure which, besides, is only relative, fluctuating, inadequate, though formerly unavoidable for lack of a better one, rather than express them in their natural, adequate and absolute measure, time . . . Hence, on the assumptions we made above, society will not assign values to products." (*ibid*, p375)

Marx and Engels considered that labour coupons could replace money, the former being the direct expression of socially necessary labour embodied in useful products.

If the profit motive, the desire to accumulate more and more surplus value, is no longer the guiding principle in the collective economy, what is? Marx argues that it is, "economy of time, to this all economy ultimately reduces itself." Since, "the less time the society requires to produce wheat, cattle etc., the more time it wins for other production, material or mental." Freed from the compulsion to increase surplus labour, society will be able to reduce working time and extend disposable, free time. Necessary labour will be reduced to a minimum and with this the separation of people into "mental" and "manual" workers can be overcome.

Finally, Marx and Engels recognised that communism would not arrive all at once or overnight. It would not be possible to move quickly from the realm of necessity into that of freedom; economically speaking, there would continue to be a situation of relative scarcity for some time. Hence, society would need to adopt a mechanism for deciding on the distribution of the fruits of labour amongst the members of society. They argued that under socialism (the lower phase of communism) each member "receives a certificate from society that he has furnished so much labour . . . and with this certificate he draws from the social stock of means of consumption as much as costs the same amount of labour" after certain deductions have been made. The deductions included:

"replacement of the means of production used up . . . additional portion for expansion of production . . . reserve or insurance funds to provide against accidents . . . general costs of administration not belonging to production . . . that which is intended for the common satisfaction of needs, such as schools . . . funds for those unable to work." (*Critique of the Gotha Programme*, Selected Works, Vol 3, 1977, p17/18)

Hence there would be inequality, but one which would be consciously reduced over time. Only under communism would the criteria for distribution change. Instead of, "from each according to their ability, to each according to their work" society would be able to adopt, "from each according to their ability, to each according to their needs". A superabundance of all necessary material goods and services would obviate the need for any form of rationed access to the products of social labour.

Marx and Engels' scientific outlook developed the case for socialism out of the revealed tendencies within capitalist society and did not impose schemas upon it. They denounced "petit-bourgeois" socialism for its desire to undo the wage labour-capital relationship and turn all direct producers back from wage slaves to private property owners of their own means of production (artisans).

Marx and Engels demonstrated that the political economy of Proudhon's utopian socialism was based on an attempt to create "socialism" through a system of competing petty commodity owners. These pre-Marxists sought not to base their socialism on class war between antagonistic and irreconcilable classes over the production of surplus value. They wanted to "purify" commodity relations, render workers and capitalists as equals in production just as they appear in exchange and thereby ignored the real underlying nature of capitalist production. They wanted wage-labour/capital, competition and profit, but without exploitation, inequality and unemployment; in short, a utopia.

This is as much as Marx and Engels established about the political economy of socialism. It would be rational, planned, democratic. It would overcome the anarchy and disproportionality of capitalist production. It would release human kind from the oppressive effects of alienated labour and allow for the development of rounded individuality which in turn could only take place in a society which guaranteed freedom from want and oppression. It would overcome the under-utilisation and waste of labour. It would avoid the needless over-exploitation of nature and end the destructive antagonism between town and country.

They made a number of assumptions about the political economy of socialism; namely, that society was in possession of all the means of production; that society was able to calculate the directly social character of labour involved in all production and that as a result indirect measurements (i.e. value and money, prices) could be dispensed with entirely. They wrote little about the specific institutions of planning or methods of calculating the relative effectiveness of different uses of labour and other inputs once money, value and prices of production lose their previous character.

Hence, the difficulty for the Marxist tradition started when some of these assumptions had to be relaxed in the light of historical developments, in particular the Russian revolution of October 1917 and the attempts of the first workers' state at economic transformation.

Economic reconstruction in a workers' state

Bolshevik policy on seizing power

Marx and Engels insisted that, after the working class seized power, it would be necessary to nationalise and concentrate the means of production. Only on this basis could society consciously distribute labour time between the different sectors of the economy in order to optimally satisfy social needs.

This general conception of the post-capitalist economy was to be found in the Marxist programmes of the parties of the Second International, including the Russian Social Democratic Workers Party. Hilferding added to the Marxist canon the idea that finance capital had become the ever more powerful brain and organising centre of productive capital, a development which objectively prepared the economy for socialism; the ready-made economic apparatus just needed to be taken in hand by the new socialist state.

State monopoly capitalism during the First World War, especially in Germany, seemed to the Bolsheviks to represent the practical proof of Hilferding's thesis. Lenin, therefore, reiterated during 1917 the importance of nationalising the banks as the most important step towards conscious political control of the economy.

However, no theoreticians of the Second International, Bolshevik or not, elaborated the idea of the "planned economy" any further than this. In particular, the concept of a centralised and planned distribution of labour time was not concretised. To the Bolsheviks it was clear that the backwardness of Russia would not allow for much central planning at the outset. This caution was rational and was reflected in the first economic measures of the revolutionary government of peoples' commissars.

The theoretical underdevelopment of Bolshevism on this score was revealed in the increasing influence within their ranks of the confused positions of the "Left Communists". Their influence was especially strong in 1920 when they argued that the emergency measures collectively known later as, "war communism" represented the first steps on the transition to socialism.

Revolutionary economic policy after October 1917 aimed to make a clear break with the capitalist past in some areas. Thus, on the day after the seizure of power by the Soviets, all land was nationalised, effectively expropriating all landlords. As the Constituent Assembly of January 1918 refused to confirm that measure the Bolsheviks decided to dissolve it. The subsequent decree "On the Socialisation of the Land" *de facto* implemented the programme of the left SRs in stating that the nationalised land should be distributed evenly amongst those who worked it and that the heavy taxes and farm rents were to be abolished. Most of the big feudal estates were thus dissolved into small and medium peasant holdings.

However, in general, the revolutionary government took a relatively cautious attitude towards the industrial and financial sectors during the first six months. The decree on workers' control from November 1917 was the second major plank of early Soviet economic policy. It allowed the entrepreneurs to continue to own and manage their factories but now under the control of the workers' representatives. The decisions of the committees of workers' control were decisive. In this way, it was hoped that the workers would learn how to administer and organise production whilst safeguarding against disruption and sabotage by the opponents of the new government.

In reality, this did not lead to social co-operation, let alone planning, but to semi-anarchist factory particularism. Contrary to what might have been expected, the government did not resort to widespread nationalisation. In the belief that neither the factory workers nor the workers' state had sufficient expertise to run production, the government under Lenin initially did not undertake nationalisations, even in the case of large industry. Only in cases where capitalists ignored the decisions of the workers' control committees were enterprises punitively expropriated.

To co-ordinate the different sectors and maintain production, the Council of People's Commissars (Sovnarkom) introduced short term and long term initiatives. For the time being, nationalisation and control over the banks was expected to suffice. In late December 1917, all banks were formally unified under a central bank. However, to make them work loyally with the government, most bank managers had to be replaced or put under strict government control.

Credit and monetary policy had to adhere to strict controls to safeguard the convertibility of the rouble. So as to allow the centre to develop overall economic control in the longer term a new body was established in December 1917—the Supreme Council of the National Economy (Vesenka). During its first six months, Vesenka was not effective but occupied itself with preparatory work. The idea was cautiously to establish central co-ordination of the individual enterprises, especially in industry, without necessarily nationalising them all and without putting them under detailed central command.

War communism

The outbreak of full scale civil war and western military intervention in May 1918 was the main reason for a major shift in economic policy in the second half of 1918. Both production and distribution were now reoriented to the aim of winning the war. but there were internal pressures as well, especially the sabotage of the bourgeoisie which had strengthened the left wing of the party.

Even before the outbreak of war, however, there were internal factors that had rendered the policy of Sovnarkom inefficient in many respects and bolstered the arguments for a left turn. Workers had spontaneously expropriated the property of their bosses and thereby increased the burden on the central bank which had to finance all nationalised enterprises. Credit exploded and monetary discipline collapsed as tax revenue plummeted. All this led to inflation and currency devaluation.

War made a return to balanced budgets and tight money control all the more impossible. The argument of the "lefts" (Smirnov, Ossinski, Krestinsky et al)—that the state should do away with the whole monetary system because it was inherently bourgeois and could not help in the transition to socialism—cut with the grain. Lenin's call from April 1918 that Russia needed improved (financial) accounting, more labour discipline and higher labour productivity fell on deaf ears.

In agriculture, war communism meant a shift to requisitioning. Workers' detachments were armed and empowered in August 1918 to put it into effect. In this they were supported by the newly established "committees of poor peasants" which were intended to spearhead the class struggle in the countryside. At the same time, propaganda was made for collective and co-operative farming, although few material incentives were available to encourage it.

As the number of state farms remained small, and requisitioning led to a reduction in the amount of land under cultivation and to the disaffection of middle peasants from the revolution, Sovnarkom dissolved the committees of the poor peasants in 1919 in order to pacify the middle peasants. Nevertheless, more and more grain found its way onto the black market and ever larger areas of land lay fallow. In response, requisitioning methods became more brutal.

Peasant uprisings mounted during 1920, not least because of widespread hunger and even famine in the countryside. Despite this, the 8th Soviet Congress in December 1920 tried to quell peasant resistance by imposing a duty to sow. It was only with Lenin's shift to the NEP in the spring of 1921 that the party finally accepted the hopelessness of such moves and recognised the need for the re-introduction of money and markets into agriculture.

Industry in the meantime had been turned into a single supply device for the Red Army. A June 1918 decree had nationalised the whole of large-scale industry in one go. In the autumn it was the turn of urban small-scale industry and in 1919 even rural handicrafts were taken over by the state.

The degree of nationalisation was so high that only 10% of the 37,000 state enterprises could really be centrally co-ordinated. The state enterprises were gathered together into trusts (*glavki*) which themselves were united under Vesenka, with the aim of centralising output. Concentration and centralisation of industry were obviously sensible measures in the endeavour to support the war machine but, because this was applied to all non-military sectors as well, it contributed greatly to the emergence of a much hated bureaucracy within the *glavki*.

Vesenka tried to direct industrial development essentially by channeling credit to the most important war industries. The *glavki* were not really able to organise, still less to plan, the whole of production and so they often simply intervened in an unsystematic form.

Exchange between state enterprises was increasingly carried out on a non-monetary basis, in other words, barter. The quantities exchanged did not follow any recognisable market regulation but rather were the result of bureaucratic arbitrariness. Against much resistance from the party's left wing and the trade unions, Lenin succeeded in establishing both one-man management in most enterprises and the use of bourgeois specialists in the army and the economy. While the latter was seen as a concession to Russian backwardness the former was presented as a progress over "rudimentary" collegiality.

Within war communist ideology, labour power ceased to be a commodity and was turned into a "service to society". The Second All- Russian Trade Union Congress, in January 1919, had accepted the principle of the "statisation" of the trade unions. This meant that, on the one hand, the People's Commissar of Labour should be elected by the trade unions, but on the other hand workers' strikes should be made illegal.

The trade unions should administer the whole of the national economy and at the same time establish the new "socialist labour discipline". In 1920 it was Trotsky who, with the initial support of the majority of the party leadership, proposed the "militarisation of labour". All railway workers were declared "mobilised for labour service" and former Red Army batallions were transformed into "labour armies".

Lenin and others increasingly distanced themselves from this policy which was leading to constant battles with the trade unions but it was only with the adoption of the NEP in March 1921 that the formal commitment to "militarisation of labour" was dropped.

At the same time, the plan for the statisation of the trade unions was relegated to a longterm plan which for the time being allowed the trade unions to represent workers' immediate interests in conflicts with their own state.

The nationalisation of the banks did not create an effective instrument for administering industry as was hoped and the cancellation of the old regime's debts did not solve the problem of financing public expenditure. Industrial administration and conscious direction of the economy required a much more sophisticated apparatus than the banks could provide and such a thing was only partially built later with the *glavki* system. At the same time, it required an effective system for measuring relative efficiciency and productivity when the only system available, the monetary system, was being actively undermined.

As the various taxes did not yield much budgetary revenue, the only major source of income for the government remained the printing press. As a result inflation rose at such a rate that many with goods to sell (especially the peasants) refused to accept paper money any more. Under the leadership of the former left communist Krestinksy, the central bank pursued a policy of hyperinflation as a tax on the rich and to destroy the bourgeois money system.

Under the impact of this policy, state industry switched to barter as far as possible, a move which was justified under the official slogan "for a proletarian natural economy". By 1919 workers were increasingly being paid in kind and in 1920 basic goods and services were provided free of charge. Payments for canteen-meals, post services, telephone, water, electricity and gas, as well as rents, were all abolished.

However, the material conditions did not exist for such a short cut to socialism and this was made clear by the huge increase in the volume of paper money which remained necessary to obtain goods from the black markets, both for enterprises and consumers. Thus, as well provoking the resentment of peasants and workers, late war communist

policy left the economy without any possibility of measuring its own development or determining how to reorient itself under conditions of peace.

Proletarian planning, in the sense of a long term and constructive undertaking for the transition to socialism, began before the civil war with a commission by Lenin to the Academy of Science. It was asked, "to work out as quickly as possible a plan for the reorganisation of industry and the economic revival of Russia".

Similarly Vesenka, through its "committee on public works", began to plan projects in early 1918. It undertook to build a 1700 km track to link the Kusnetzk coal basin with the industries of the Urals. All these projects were abandoned with the onset of the civil war, when most power over resources was placed in the hands of the "extraordinary commission for the supply of the Red Army".

Vesenka never managed to become the "single central economic authority" that its leaders wanted it to be. Similarly, the "commission of utilisation" which was established to work out utilisation plans for all individual products, shared its authority with the supply sections of the *glavki*. In March 1920, Trotsky proposed strengthening the regional bodies somewhat at the expense of the *glavki* and the commission of utilisation and centralising the task of national economic planning under the "Council of Labour and Defense" (STO) which embraced all peoples' commissars concerned with economic matters. His proposal was adopted by the ninth party congress.

Hyperinflation during 1920 made all progress towards a single economic plan impossible, but the year saw important partial plans, e.g. Order 1042, which was Trotsky's plan for the reorganisation of the railways. Lenin approved of such concrete plans and especially favoured the commission for the electrification of Russia (Goelro) which outlined a ten year project for the development of a "network of electric power stations" in Russia. It was not until 1921 that Gosplan began its work on the single economic plan, and it was to take several more years before this work could become effective.

War communism meant the sudden abolition of capitalism as distinct from the policy of control and subordination followed in the first six months of the revolution. It suppressed the law of value in key sectors of industry through the adoption of political criteria for forming prices, for allocating credit and—in the later phase—bartered exchanges.

Was it planning? Yes, but disconnected from the transition to socialism. It was a short term and desperate form of planning to win the war but not proletarian planning in the sense of the Marxist programme. The latter was envisaged as a set of steps in the direction of a socialist (i.e. stateless) economy. This implied the construction of a system of economic regulation, based on labour time, that is efficient, transparent and completely controlled by the producers. And this in turn implies a growth in the productive forces and a decrease in social inequality.

The Russian political and military situation did not allow for that between mid-1918 and early 1920. Of course, the winning of the war saved the proletarian dictatorship and thereby the possibility of any transition to socialism and, therefore, war communism was tactically rational and historically justified. Nonetheless, this cannot alter the fact that during the period of war communism both the economy and the plebeian classes suffered enormously and that this represented a huge setback for the transition to socialism.

Apart from the simple destruction of productive forces and the shrinkage of the working class (down to 1.3 million workers in 1921 from 3 million in 1917), war communism was also —contrary to its aims—a regime of increasing inequality. The privileges of the specialists were not reduced but increased and black marketeers of all kinds made enormous profits out of this situation of "generalised want".

It was a mistake and an expression of theoretical immaturity that most Bolsheviks saw war communism itself as part of the transition to socialism. This was Bukharin's position in his *Economics of the Transition Period*, a work which Lenin fundamentally praised.

Even Trotsky's proposals in 1919/1920 suggested that war communism was the starting point for the transition to socialism. In Febuary 1920, he outlined three conditions for this: a) a tax in kind for the peasants which would allow them to exchange their surplus for industrial products at a rate of exchange set by the state; b) the militarisation of labour as the basis for any future labour time calculations and c) the reduction of the excessive bureaucratism of the *glavki* system.

In other words, although Lenin and Trotsky initially saw war communism as a pragmatic response to the war situation, they later gave in to the ultra-left view of starting from there in order to arrive at socialism.

But was there any alternative? For the duration of all-out civil war, that is, until early 1920 the answer is, probably not.

However, with a clear theoretical analysis of the economic options, an earlier change to NEP would have been possible. The year 1920 could have been used to prepare NEP by stabilising the money supply and introducing restricted markets in the countryside. This would not only have saved time but would have spared the working class and the poor and middle peasants the worst aspects of late war communism.

New Economic Policy (NEP)

Lenin's New Economic Policy (NEP) was adopted by the party in March 1921 against the background of the Kronstadt uprising and peasant revolt in the Tambov region. Forced grain procurement was abandoned and replaced by a tax which was lower than the previous level of requisitioning.

Whatever the peasants retained they could freely trade on local markets. Even the originally restricted access to "local markets" was soon relaxed because supplying the towns was impossible without intermediary traders.

By October 1921, it became clear that NEP could not be restricted to agriculture; the new approach had to be extended to all economic spheres. The party retained central control over the so-called "commanding heights" of the economy, that is, the banking sector, foreign trade and large-scale industry and transport, but the all-embracing nature of nationalised industry was reconsidered.

Thousands of small state shops were leased, or even sold off, to private entrepreneurs. Later, even some big private sector enterprises were approved; by 1924/25 there were some 18 private plants in operation which employed between 200 and 1,000 workers each.

In late 1921, industry was completely restructured. Enterprises of a similar kind were united in trusts and these were instructed to operate on a purely commercial basis from early 1922 onwards. Products were to be sold wherever they could command the highest prices and raw materials were to be bought from the cheapest possible sources. The state would not grant credits unconditionally but only where there was a good chance of securing a reasonable return.

The Peoples' Commissariat for Finances sought to stabilise the rouble and therefore the money supply had to be curbed. This in turn led to closure of some factories and in others the reduction of the workforce. As most enterprises had no financial reserves, they were obliged to sell their output at almost any price. Since demand was low, so too were industrial prices and unemployment increased as a consequence.

Lenin defended the necessity of what today would be called "shock therapy". Even more, he argued that foreign firms should be allowed to exploit Russian oil fields and export Rusian wood, because this would bring in foreign currency and allow the workers' state to import essential materials and technologies. In practice, although foreign trade did resume and in 1924/25 exports were nine times higher than in 1921/22, the hostility of the international bourgeoisie ensured that the import of foreign capital remained weak throughout the 1920s.

During NEP, most price controls were abolished. Despite the government's best intentions, this allowed inflation to spiral upwards. Industrial prices were thus low only in relative terms, as measured against the price of food and raw materials. For this reason the Soviet government launched a new currency in mid-1922, the chervonets. In 1923, both the rouble and chervonets existed alongside each other, the chervonets stable but rarely used in everyday transactions and the rouble being devalued daily as inflation escalated.

Without deliberately steering the economy into a complete slump it was impossible to halt inflation immediately and it was only in February 1924 that the rouble could be withdrawn. By that time, one chervonets was equivalent to 500 billion roubles of 1921! The stabilisation measures introduced by the People's Commissar of Finances, Sokolnikov, worked sufficiently well that the government budget of 1924 yielded a small surplus.

Whereas in 1922 prices had swung heavily in favour of the peasants, by the autumn of 1923 the pendulum had swung completely in the other direction. Industrial prices were now three times higher than agricultural prices, compared to 1913 ratios. This became known, in Trotsky's memorable phrase, as the scissors crisis: a widening gap between the rising blade of industrial prices and the descending blade of agricultural prices. Many peasants hesitated before bringing their grain to the cities. This threatened not only the supply of food to the cities but also the strategic alliance at the heart of the political system - the workers' and peasants' alliance (*smychka*).

The reasons for the change in relative prices were quite obvious. In the first place, agriculture had recovered much more quickly than industry because it did not require as much technological renewal and was not crippled as badly by the lack of a transport infrastructure. Secondly, Vesenka had reduced industrial competition between the trusts by combining many of them into single "syndicates". This allowed the trusts to set monopoly prices. Finally, credit policy was relaxed again in comparison with 1922 and this removed the pressure on enterprises to sell at the prevailing market price. As a result, stocks accumulated and many factories produced at well below full capacity.

In late 1923, drastic measures were taken to reverse rising industrial prices. Price controls were introduced and workers were sacked to lower the costs of production. Credit was made more difficult to obtain in order to force enterprises to sell their stocks. At the same time, a state trading organisation was established which for the first time allowed industry to sell its products directly to the villages. This cut out many NEP-men intermediaries and allowed the savings to be passed onto the peasants in the form of lower prices. By these combined measures the government succeeded in cutting relative industrial prices by more than half by April 1924.

1924 and 1925 were the "best years" of NEP in the sense that both agriculture and industry expanded relatively harmoniously and regained or even surmounted pre-war levels of production. Some 90% of all industrial workers worked in trusts which were directly or indirectly subordinated to Vesenka. The factories were neither sovereign economic units nor legally independent entities. They did not draw up their own financial accounts; rather their figures were assimilated to the overall performance of their trust.

Vesenka's policy towards different trusts varied. In strategic sectors, it issued detailed orders and supervised their performance. In light industry, the trusts themselves had to draw up production plans according to the prevailing market conditions and Vesenka did not intervene greatly in this. There was no centralised planning at the time. Different planning functions were not even unified within one all-Russian institution. So, fragmented administrative planning was carried out by Promplan, the planning department of Vesenka, whereas the preparation of overall national planning was in the hands of Gosplan, a research and co-ordinating department of STO (Council of Labour and Defence).

In 1925/26, Gosplan issued for the first time "control figures", which reflected and represented all economic activity in the country in the various sectors and in their respective proportions. In addition, they contained a prognosis about possible future developments. There was a great deal of opposition within the ascendant bureaucracy against any increased power for Gosplan. Thus Krzhizhanovski, the head of Gosplan, complained to the 15th party congress about the lack of co-operation from other administrative bodies. Nevertheless, although the control figures were not a directive plan they were already more than a purely passive prediction. They were a set of guidelines for strategic investment decisions and the basis for a discussion of economic priorities.

Up until the scissors crisis, trade, retail and wholesale, was almost exclusively in private hands. From 1924 onwards, a state trade organisation was up and running and the co-operative trade system was improved. Although the private sector share of retailing fell in 1925/26 to 42% and to 37% a year later, in absolute terms, private trade continued to grow and trade was, therefore, an important sector within which a "new bourgeoisie" could develop.

While large-scale industry remained predominantly in state hands, within small scale industry the situation was quite different. Fewer than 2% of the workers employed in that sector worked in state run firms; the rest belonged to the private industrial sector which became a second important arena in which the newly emerging capitalist class could strengthen itself. Of course, in many cases, the private owners were heavily dependent on the state sector which was, therefore, able to exert some control over the market. But, on the other hand, the NEP-men controlled not only the traditional village communities but also increasingly the rural soviets. In this way, they became a political force which sought to put pressure on the workers' state to grant greater freedom for commerce.

Agriculture remained predominantly private during the whole NEP period. Less than 2% of the agricultural land was cultivated by state farms or co-operatives in 1927. Indeed,

the land reform after 1917 had drastically increased the number of small peasant holdings (from 17 million to some 25 million) whereas their average size decreased.

The traditional Russian village community was strengthened and this meant a strengthening of the ideological grip of private property and the bourgeoisie. Naturally, the growth and extension of the market under NEP did not benefit all peasants; on the contrary, it contributed to a growing class differentiation in the countryside. The wealth and the influence of the rich peasants (*kulaks*) expanded. A third of all peasants hired labourers. Others leased additional land from poorer peasants, some lent money at exhorbitant rates of interest or lent grain to the small and medium peasants in the spring, when they had used up their reserves.

The kulaks themselves were not forced to sell all their grain immediately after the harvest but could store it until next spring and summer when they could take advantage of much higher prices. The kulaks were obviously the core of the Russian bourgeoisie in the 1920s. They identified with the outlook of the new commercial and small scale industrial bourgeoisie. Together they waged a class struggle to reverse the gains brought to the working class by the October revolution.

The party leaders did not acknowledge these dangers and even less did they mobilise the forces of the workers' state to defeat them.

Before the First World War, it was the big semi-feudal landlords and the kulaks who provided most of the grain for the cities. After the break-up of the big estates in 1918, and their redistribution to millions of landless peasants, the share of grain consumed in the countryside itself grew while the proportion delivered to the cities or set aside for export shrank dramatically.

In the mid-1920s, when the area sown and the amount of grain harvested achieved pre-war-levels again, the amount of marketed grain was still only half the level of 1913. This mainly hit exports which, in turn, retarded the rate of industrial development as industry was dependent upon the import of capital goods. Grain exports in 1913 peaked at 12 million tons but had fallen to 2.1 million tons in 1926.

In 1927, grain export shrank further to 0.3 million tons and the already meagre supply to the cities was put at risk. The Left Opposition in the Communist Party, led by Leon Trotsky, had long warned of this approaching catastrophe which was the predictable result of the right-wing politics of the ruling Bukharin/Stalin-bloc within the party and government apparatus.

A series of "special measures" was pushed through by the government. Additional industrial supplies were rushed to the grain growing areas; heavy penalties were handed out against those speculating in the price of grain. Yet, during the year up to October 1928, the amount of grain brought to urban markets shrank by a further 14%. Cities were near to famine although there were supplies enough in the countryside. Meanwhile, the shortage of industrial goods in the villages was estimated to be as high as 100 million roubles.

The kulaks had upped the stakes in their confrontation with the government and they managed to win all the middle peasants to their side. The workers' and peasants' alliance was at breaking point, if not already broken. The government's reaction to this danger was contradictory, reflecting both the faction fight in the party and the centrist, wavering role of the bureaucracy.

Already, in 1926, a faction of the bureaucracy under Zinoviev and Kamenev had distanced themselves from the pro-bourgeois line of Bukharin in the face of the mounting pressure from discontented urban workers.

They joined with the Left Opposition to launch the United Opposition. Stalin, who represented the centre faction of the bureaucracy, remained in his bloc with the leader of the Right Opposition, Bukharin, which soke for the better-off peasants. For Stalin defeating the Left was the first priority since it alone threatened to abolish the mounting privileges of the ruling layer.

Nevertheless, Stalin was forced to pay lip service to the proletarian anti-Bukharinite discontent. Some measures were taken against the ever more shameless activities of the "new rich"; their superprofits were subject to a progressive tax. All in all, however, these measures did not deliver a decisive blow as can be seen from the fact that the proportion of the national income earned by the private sector fell by only 3% between 1926 and 1928, and still accounted for nearly half.

It was only in 1929 that Stalin made a decisive turn towards the collectivisation of the peasants. He also implemented a rapid investment programme in heavy industry to be carried out in conditions of economic autarky.

In order to carry it out against all resistance, the Stalinist apparatus, over the course of the next few years, further centralised political power in its own hands and destroyed the vestiges of any independent organisations (e.g. trade unions) by merging them with those of the bureaucratic state machine. Economic direction became super-centralised, top-down command planning.

The debate on plan and market in the USSR in the 1920s and 1930s

The Soviet Union in the 1920s and 1930s was a laboratory in which various theories about building socialism were bench-tested. Marx and Engels had bequeathed a handful of suggestive remarks. The Second International had expanded little on their insights. Now, pressing practical problems demanded new answers, solutions which were of more than passing academic importance. The fate of revolutions, the destiny of tens of millions was at stake.

The Russian revolution of October 1917, and the experience of economic transformation over the next two decades, sharply divided opinion. Reformist and openly bourgeois economists denounced the very idea of transition to socialism as a utopia, if not in general then at the very least in a backward rural country.

In these years, the proponents and enemies of socialism engaged in argument and counter-argument. This debate was no less pronounced inside Russia than outside. The main theoreticians and party leaders of Bolshevism grappled with issues such as the nature of economic categories in a post-capitalist society, the relative weight of market mechanisms and planned allocation in the distribution of resources, the relative tempo of development of industry and agriculture, the function of money and prices once the law of value no longer reigned supreme.

Bukharin

Naturally, since this debate was no idle academic exercise, the ideas reflected powerful social forces, each with an important stake in the direct of economic policy after the revolution. These social forces found their representatives in leading figures within the Communist Party. Nikolai Bukharin had been a representative of the left wing during war commu-

nism (1918-20) and had shown himself more than prepared to use administrative force to achieve economic goals. But, after 1921/22, he underwent a rapid transformation, first into a late convert to NEP and then into the leader of the right-wing inside the Communist Party.

He argued that NEP would have to be applied for a long time, at least for a whole generation. Now, it was impermissible to use force against the peasantry. Although it might be politically more correct to support the poor peasants, it was the middle and rich peasants who delivered the grain and, therefore, it was important to promote the interests of these layers. Any other policy would lead back to the old methods of requisitioning and thus destroy the workers' and peasants' alliance.

Bukharin was convinced that it would be possible to build socialism along this road and that it was only a question of what tempo of development was best. In Bukaharin's mind it was unwise to go any faster towards socialism than the peasantry was prepared to go; in his famous words, Russia had to "ride towards socialism on a peasant's nag". He was sure that even the kulaks would organically come to accept socialism if the party did not alienate them. His famous call on the kulaks to "enrich yourselves" was not, in his view, directed against socialism because socialist industry would always and automatically be superior to the peasant economy. Industry would not need any special support by the state.

On the more theoretical plane, Bukharin reasoned that the law of value was a universal economic law which only showed different forms of appearance under different social conditions. It had changed during the transition from simple commodity production to capitalism and it would take on a different form again in the transition to socialism. Specifically, it would operate not in an anarchic, market led fashion, but in a direct and conscious manner.

He understood the plan merely as the conscious anticipation of what would otherwise be achieved spontaneously. Naturally, Bukharin recognised that this could spare society from undertaking wasteful projects, and distribution would certainly be more equitable. Nevertheless, the structure of production would fundamentally be the same and it followed that the growth of the market would not pose any fundamental danger to the workers' state.

Bukharin's conceptions reflected the adaptation of layers of the party leadership towards the capitalist elements which were getting stronger under NEP. It explicitly denied the inevitability of further class struggles under the dictatorship of the proletariat. Yet it had become increasingly clear to the proletariat that to retain power and to secure further advances a conscious struggle against the bourgeoisie was still necessary.

Preobrazhensky

It fell to the Left Opposition to formulate the objective interests of the proletariat in the transition, whereas the bureaucracy around Stalin typically wavered between the different class pressures but tactically allied very early on with the right wing because increasingly it wanted to insulate itself from the pressure of the working class.

The chief economic theorist of the Left Opposition was Evgeny Preobrazhensky. He stressed the urgency for the proletariat to develop the industrial economic base of the workers' state. He vehemently rejected the idea that socialism could be achieved at "a snail's pace". Dangers were present within both the world and domestic market. If Soviet industrialisation did not keep pace with the West and if the private sector inside the USSR developed quicker than the socialist sector, then the workers' state would not be saved even by the best Red Army.

The tempo of socialist industrialisation was decisive for him. It should therefore be given the highest priority in setting the economic goals of the workers' state. To raise the pace of industrialisation, part of the agricultural surplus had to be syphoned off and directed towards industrial investment and, especially, to obtain foreign technology. This would bring a wide range of industrial products to the countryside more quickly.

The transfer of surplus from the private agarian sector to the state industrial sector should be carried out by both unequal exchange (prices for industrial goods set higher than the cost of production) and a progressive income tax. The rich peasants should be made to bear the brunt of this double tax burden, whereas the poor peasants should be assisted and coaxed into co-operative production by providing appropriate technology and cheap credit. For Preobrashensky, it was important to strengthen the alliance with the poor and middle peasants, but it was an illusion to hope for a stable alliance with the kulaks.

In theoretical terms, Preobrashensky formulated a specific economic law of the socialist sector in a transitional society. This he called the law of primitive socialist accumulation, a law that comes into fundamental conflict with the law of value prevailing in the domestic private sector and on the world market.

The law of value was not understood by Preobrazhensky as simply the capitalist variant of a universal law regulating the expenditure of labour time throughout all historical periods. The very essence of the law of value implies the subjugation of the living worker to accumulated capital (i.e. machinery). This law necessarily reproduces capitalist relations of production and it reproduces them on an ever expanded scale if left to develop spontaneously.

The law of primitive socialist accumulation, by contrast, establishes specific targets for the growth of different sectors of the economy. Moroever, the rate of accumulation for the whole economy is determined by the specific investment rates agreed upon for the socialist industrial sector. Part of the law of primitive socialist accumulation is the iron necessity of transfering surplus from the private sector to the socialist sector. Anything that violates that law puts the workers' state in jeopardy.

Critics have levelled several charges against Preobrazhensky which are unfounded. First there is the question of his method of analysis. Preobrazhensky maintained that it was an essential first step (one Marx himself made) to analyse the economy of the transition period in abstraction from politics. This led Bukharin to criticise him for equating the capitalist mode of production with the post-capitalist one, a charge repeated in the 1970s by Maoist influenced Stalinists who argued that the proletarian state apparatus is no longer part of the political superstructure but an integral component of the production relations themselves.

Thus, it is held to not be possible to abstract from this apparatus even within the first stage of economic analysis. Preobrazhensky was denounced for his "economistic error" which, it was said, led him to undervalue the workers' and peasants' alliance and to a sectarian policy towards the peasants as a result.

This charge is complete nonsense. As long as a state machine separated from civil society exists (and this is the case too for a healthy workers' state until it withers away) the political forms will be determined in the last analysis by the economic structure on which they rest. Therefore, to understand the framework within which state policies are made, and the character of the institutions that carry them out, it is necessary first to analyse the most basic economic laws which govern society.

Related to this charge is the objection made to the use of the term "law" when referring to the regulation of the non-capitalist, "socialist" sector. Allegedly such terminology suggests the equally blind economic processes are at work in a workers' state as within capitalism. This, it is said, would undervalue the importance of a vibrant, consciously articulated workers' democracy in the transition period and thereby prepares the way for a bureaucratic and administrative regime.

Stalinists, for example, could use the concept of an "objective economic law" to legitimise their crushing of workers' self-management in the workplace and soviet democracy in society. This objection to the "lawful" character of socialist accumulation has also been repeated by anti-Stalinists such as Christine Samary, a leading theoretician of the United Secretariat of the Fourth International but this does not prevent it from being false.

Any isolated workers' state is burdened internally by surviving capitalist elements and is surrounded by a hostile capitalist world market. This forces upon the workers' state an obligation to undertake quite definite rates of accumulation and set specific targets for the transfer of surplus from the private sector to the state sector. This force is accurately described as a law. This does not preclude this law from being understood and being consciously handled. But a law it remains.

And what about the internationalism of Preobrazhensky? Did his ideas on forcing the pace of industrialisation in the Soviet Union anticipate Stalin's "left" turn in 1928/29? Are they in essence more compatible with Stalin's theory of "socialism in one country" than with Trotsky's permanent revolution? No, they did not and they are not.

From Preobrazhensky's early works through to his writings in the early 1930s, he repeatedly emphasised the necessity of international revolution as the only solution for the Soviet Union's economic problems. He was a leading member of the Left Opposition and thus loyally adhered to all its internationalist positions. What is true is that his internationalism lacked complete consistency. In 1928, when the communist movement discussed at length the perspectives for the Chinese revolution, Preobrazhensky disagreed with Trotsky. He felt that China was only ripe for a bourgeois revolution. This, of course, ignored the international character of the class struggle, showed a lack of understanding of the imperialist system and stopped short of a clear understanding of the concept of permanent revolution.

Preobrazhensky's position on China was his first capitulation to Stalin. He later distanced himself quite clearly from Trotsky (1929) and even denounced other oppositionists cited as defendants in the Stalinist show trials (1936-38). What became clear in the course of his evolution is that Preobrazhensky had a totally inadequate understanding of the nature of Stalinist bureaucracy.

Of course, Trotsky himself mistakenly saw the main enemy in the 1920s to be the right wing and the Stalinist centre merely as more or less wavering and unstable force. However, the liquidation of the Left Opposition in 1927 created a new situation. The bureaucracy consolidated into a self-conscious caste with its own interests and began openly to fight for complete power. The strike of Stalin against the right had to be seen in that context. It was not so much a concession to the workers and the Left Opposition as a means of securing undivided bureaucratic power.

Preobrazhensky did not realise or accept that. Moreover, his inability to understand the stages of the Stalinist political counter-revolution was reflected in his economic work insofar as he never made completely explicit the importance of proletarian consciousness in carrying out the law of primitive socialist accumulation in a series of specific tasks. This law can only assert itself positively through the subjective action of the multi-millioned working class; such consciousness cannot be substituted by bureaucratic paternalism. Clarity on this question divides unfalsified Trotskyism from the precious but inconsistent heritage of Preobrazhensky.

Trotsky

Trotsky's contributions to the Marxist canon on the transition to socialism emerged after 1921 through a series of factional debates inside the leading committees of the Russian Communist Party. They are to be found in a series of policy prescriptions for overcoming the isolation and backwardness of war torn Soviet Union rather than in abstract theoretical texts.

Nevertheless, Trotsky's thoughts are rich in lessons, many of them codified in his 1936 book, "The Revolution Betrayed". Throughout the 1920s and 1930s, his ideas represented a realistic and practical perspective for economic growth in a socialist direction. They stood in marked contrast both to those who advocated a policy of state capitalist industrialisation under the dictatorship of finance and at a pace dictated by the tempo of agrarian development and to those who opted for the policy of "socialism in one country" and its adventurist industrialisation targets.

Trotsky's contribution to the political economy of transition spans five inter-related areas. First, he insisted on the need for the workers' state to take over and use a number of inherited economic categories and mechanisms (e.g. stable currency, markets). Secondly, he advocated the planned industrialisation of the backward Russian economy in order to raise the productivity of labour and strengthen the working class.

Next, Trotsky argued for the tempo of industrialisation to be set higher than that of agriculture and to place finance at the service of industrialisation, not the reverse. Fourthly, he considered it urgent to formulate an overall plan for all sectors of finance, production and distribution as soon as the material possibilities allowed it and, thereby, to subordinate and manipulate the market so that it would serve the tasks of socialist construction.

Finally, and crucially, Trotsky was a consistent spokesman for workers' democracy (in consumption and production) as the only way of improving the quality of production on a rational basis, as the only way of getting a correct picture of what resources were available to society, and the only way to monitor the efficient fulfilment of the plan.

Trotsky and Lenin, together with the overwhelming majority of the Communist Party, were united in the turn to the New Economic Policy (NEP) in 1921. The devastation of the economy under war communism made necessary, and the

end of the civil war made possible, a concentrated attempt to revive food production. This was needed to feed the cities and to create a grain surplus for export which would earn the foreign currency necessary for capital imports. NEP involved a revival of private property in the retail sector and small industry as well as material incentives to the peasantry. Although the state retained ownership of the main means of production and communication, nationalisation on its own was insufficient to guarantee the socialist direction of economic reconstruction. NEP could only be a weapon for socialism if it were subordinated to an overall plan, anything else would ensure that a strengthening of the market would deepen capitalist development.

Hence Gosplan set to work in April 1921 alongside NEP. For the first year, Lenin struggled against overambitious schemes for planning the whole economy on the grounds that the material basis for it was lacking (i.e. a sufficient level of state ownership of the economy, sufficient expertise). Concrete partial plans for separate parts of the economy were undertaken (e.g. transport, power generation). During 1922 and 1923, however, such partial planning became insufficient, indeed, dangerous.

NEP's success in raising agricultural output resulted in a disequilibrium in the overall economy; food stocks were in surplus and prices fell. Meanwhile, industrial revival was lagging behind for want of capital investments. Capacity restraints led to shortages and prices rose. A "scissors crisis" emerged whereby the peasants could not sell to the towns and industry could not sell to the countryside. The response to this crisis defined the alternative conceptions of socialist transition inside the Russian Communist Party; a series of sharp factional struggles erupted in 1922 which ended with the victory of those advocating "socialism in one country" in 1925.

Trotsky and the Left Opposition (LO) were the only ones to advance a policy of a centralised national plan that integrated all sectors of the economy (finance, industry and distribution) into a coherent whole based on the primacy of industrialisation and the preservation of a stable currency. Accordingly, Trotsky fought to turn Gosplan's operations away from mere forecasts for sectors of the economy and towards drawing up objectives and directives for production and finance.

Industrialisation was to be financed by taxation on agricultural profits, by foreign loans and by earnings from grain exports. Emphasis was to be given to light industry where investments had a shorter lead time and would produce the goods urgently needed by the peasants. Capital imports should be focused on those machines that the USSR was least capable of producing itself.

Such a policy did not count for its relative success upon receiving help from a successful socialist revolution in industrialised Europe in the short term, nor did it seek to isolate the USSR from the economies of the capitalist west. Rather, it sought to incite and encourage the revolution abroad while appealing to the economic self-interest of a Europe and USA in need of markets for their goods and outlets for their capital.

It was during the formulation of this programme that Trotsky first stressed the importance of preserving a stable currency unit during the transition to socialism. Against those who thought it possible to "do away" with bourgeois categories such as money and prices and deal only in physical quantities, Trotsky insisted that any progress was conditional on preserving an independent qualitative measurement of labour time embodied in various products. Indeed, Trotsky argued that such measurements be given a wider application than they had had hitherto in a largely backward agrarian country. Such a policy was essential if real improvements in the productivity of labour were to be accurately measured over time and against those levels prevailing in the outside capitalist world.

In the years 1922-25, Trotsky and the LO were opposed by different factions. At one extreme stood Sokolonikov as head of the Finance Ministry (Narkomfin) who objectively pursued a policy of state capitalism for Russia. Narkomfin wanted to take NEP onto a higher plane. They argued that since the USSR had a large backward peasant economy the best return on any given amount of investment would come from agriculture. The USSR should, therefore, exploit its comparative advantage and export grain and import manufacturing goods.

Bukharin argued that peasant prosperity would lead to them spending their money on industrial goods at a tempo determined by their willingness to spend. Later, imported machinery could be used to process agricultural goods and eventually heavy industry could be financed. This policy commanded a majority in the Politburo in 1922/24. It stressed the autonomy of finance and credit from industry, even stating that credit was not susceptible to planning. Credits should be restricted so as to preserve the strength of the rouble, this would make it attractive to foreign investors who might, therefore, extend credit for imported machinery.

Such a view of economic development, under conditions of NEP, could only lead to a weakening of the socialist elements of the economy. This was emphasised by the fact that, in order to satisfy the peasant demands for industrial goods in short supply, the Finance Ministry insisted that state credits to industry be restricted or cut, forcing factories to sell its goods at whatever prices would clear the stocks. In the conditions then prevailing under NEP (instructions to make a profit), this policy led to lower prices, wage delays and unemployment in 1923/24. In turn, this anti-working class/pro-peasant policy led to a revival in industrial unrest and left oppositional forces inside the Soviets and party.

Agriculture before industry, finance over industry; this was the anti-socialist policy of the right and centre of the RCP. This policy was not an alternative strategy for socialism in a backward agrarian country, as they thought, but an objective policy for the strengthening of capitalist laws of motion. Trotsky insisted that it would be economic suicide to allow the pace of industrialisation to be set by the gradual accumulation of savings in the countryside.

The partial industrial recovery under NEP had reached its limits; idle capacity had been utilised and reconstruction was at an end. Large capital investments were needed otherwise there could be no prospect of satisfying the peasants' demand for goods. They would hoard or consume more of their output, or even destroy it since the prices were too low for profitable sale to the cities. But, to finance investment there needed to be forced savings and a national integrated plan was essential to undertake this since investments would only yield the desired results several years down the road.

The LO did not pretend that their policy of socialist transition was without contradictions—real social contradictions. They naturally existed. First, the rate of industrial accumulation could not be set so great that it was at the expense of the health and working conditions of the working

class; this was one major difference from capitalist accumulation.

Secondly, planned industrial investments would necessarily lead to postponed consumption both for workers and peasants. This could have led to peasants withholding supplies. This would lead to a failure to meet export orders. The resulting collapse in export earnings would inevitably result in an inability to purchase much needed capital imports.

Such social contradictions had to be faced. Action in 1922/23 was necessary to avert a greater crisis further down the road. The only real chance of alleviating the contradictions was to secure help from the more industrially developed west, hence the priority of seeking revolutionary success in the USSR's neighbours.

During the course of 1925, the bloc against Trotsky over economic matters broke up into two camps. Trotsky kept his distance from both of them. In 1924, Stalin made a decisive shift towards the theory of socialism in one country. Having failed to take advantage of the German revolution in 1923, he now adopted the conservative position that Russia could not count on help from outside and would have to rely upon its own resources.

Bukharin agreed with the theory and argued that these internal resources were mainly to be found in the rural economy; henceforth, socialism would have to proceed "at a snail's pace". Although Stalin remained in alliance with Bukharin, the former began to differentiate himself on economic policy by referring to the need to give more attention to the development of heavy industry, one based on a huge inflationary increase in credits.

The return of the grain crisis in autumn 1925 caused a breach in the anti-Trotsky bloc. The peasants withheld grain for lack of goods in the towns to exchange it with. Bukharin and Stalin made further concessions to the peasants. Zinoviev, Kamenev and Sokolnikov broke their bloc with Stalin and Bukharin, arguing that the kulaks were the greatest danger to socialist construction. Nevertheless, Zinoviev continued to emphasise the need for financial discipline over industrial accumulation alongside Sokolnikov and thus failed to embrace Trotsky's alternative.

The grain crisis reappeared with a vengeance once more in 1927 due to the failure to adopt the LO's policies. The failure to invest in order to overcome the goods shortages in 1925 led directly to the adventurist and bureaucratic attempts to eliminate the peasants as a social class after 1927. All the savings of society were to be monopolised for heavy industry. Trotsky rightly argued that this was wrong. Investments should instead be concentrated on light industry to relieve the goods famine; heavy industry, which the USSR was least able to make efficiently, should be imported. Stalin's policies would only lead to even further goods shortages in the villages.

A further victim of the right and centre's transition strategies after 1925 was the plan itself. By 1925, Gosplan was moving away from its previous passive role as a collator of statistics and towards a directive role as the formulator of integrated, cross-sectoral plans for growth. But Gosplan set its targets by reference to the growth rates of 8% - 10% p.a. typically achieved in phases of capitalist economic upswing.

Trotsky rightly characterised these as timid and argued that growth rates of twice that magnitude could be achieved by the mobilisation and involvement of the workers themselves in planning. After 1926/27, Stalin's adventurist policy of super-industrialisation gradually eclipsed the scientific work of Gosplan. Gosplan's work on the First Five Year Plan was distorted by the factional intervention of Stalin. After the December 1927 CPSU Congress, all questions of tempo and proportionality in planning were cast aside in the search for more absolute growth in the heavy industrial sector. Stalin was henceforth to denounce all talk of equilibrium growth as "bourgeois deviationism".

At first, Trotsky considered Stalin's swing in late 1927 to super-industrialisation a mere episode, a prelude to a further swing to the right and more concessions to the kulaks. This error of judgement was due to two factors. Firstly, Trotsky considered that the main threat to the socialised property of the USSR came from the right faction of Bukharin, expressing the interests of the kulaks. Secondly, Trotsky was under pressure to demarcate the industrialisation policy of the Left Opposition from that of Stalin. During 1928/29, oppositionists such as Preobrazhensky and Radek argued that there were now no significant differences between the transition policy of the LO and that of Stalin.

By 1930,Trotsky was forced to recognise that the turn was more than an episode or zig-zag. He came to understand that it entailed a bureaucratic destruction of the social base of the right opposition to Stalin's faction and the creation of a set of economic relations that corresponded to the rule of a dominant centre faction. These relations were as hostile to the pro-capitalist logic of market reforms as they were to economic control by the working class itself.

Trotsky was completely correct throughout, however, in distinguishing the economic policies of the LO from those of bureaucratic adventurism now embarked on by Stalin. In regard to the technical aspects of Stalin's economic policies, Trotsky made his objections on four grounds. First, the tempo of industrial development (investments) envisaged in Gosplan's control figures were unrealistically high. The credits set aside as a result were far in advance of actual output, leading to massive inflation during the course of the plan, debasement of the currency and rendering the objective measurement of productivity an idle exercise.

Second, the proposed structure of industrial investments was lop-sided in favour of heavy industry and against light industry. This disproportionality was both inefficient in its effects (investments in light industry would be more productive) and would exacerbate the existing consumer and light goods famine faced by the workers and peasants; hence disproportionality between agriculture and industry was a natural consequence of this adventurism.

Third, Trotsky objected that the conscious policy of economic isolation from the capitalist west was unnecessary and self-defeating. A vigorous policy of foreign trade and selective capital imports would be more efficient and show quicker results.

Fourth, Trotsky condemned the collectivisation programme which aimed to destroy the peasants as a social class. Stalin was driven to this administrative solution by the failure to adopt a realistic programme of light industrialisation and foreign imports in the years 1924-27. The grain crisis and hoarding of 1927 prompted Stalin to undertake a desperate "solution".

Trotsky rightly argued that the USSR, at that time, simply did not possess the material/technical basis for a policy of generalised and rapid collectivisation of agriculture. A catastrophic fall in labour productivity could only be avoided if the state were to provide the machinery and equipment necessary for very large scale farming. This the state could

not do, especially since it refused to import them. Hence, the peasants would slaughter their livestock rather than have it stolen and this would lead to a further fall in output. By 1932, Trotsky's arguments and predictions were proved correct by the widespread famine of that year.

During the course of the First Five Year (FFYP) plan, Trotsky charted its effects. Judged from the standpoint of the transition to socialism it was an utter failure. Trotsky argued that the working class was transformed into an object of the plan and a factor of production, to be deployed by edict like all other components of the labour process. As a result, no correctives to the plan could emerge in the light of its attempted implementation; no quality control over output could be introduced; no information that might lead to plan modification was possible.

Hence, bottlenecks and disproportions were inherent and unavoidable elements of the system. As to the peasants, the attempt to liquidate them politically as a class stood in complete contradiction to the tasks of socialist transition. Marxists envisaged the gradual disappearance of this class, through voluntary collectivisation and their transformation into proletarians. As capital was applied to the land and productivity increased, the numbers working on the land even as wage labourers would shrink. Such a process would strengthen the consciousness of all social layers and attach them firmly to socialism.

Trotsky was aware that, from the point of view of the labour process, the ruthless centralisation and combination of all the factors of production could produce spectacular quantitative results in certain sectors, even if the relative inefficiencies were legion. But, from a social point of view, the physical destruction and exhaustion of workers and peasants, generalised shortages and poor quality provisions, combined with total political repression, alienated the working class from the project of socialist transition.

Trotsky's critique of command planning was powerful and contained a realistic alternative. By the early 1930s, Trotsky recognised that such was the calamity of command planning that the controlled partial return to market relations and the flowering of soviet democracy was a pre-condition of any substantial economic reform.

Market correctives had to begin with agriculture and monetary stabilisation. Trotsky called for a halt to collectivisation and even its reverse. He suggested that 80% of farms be turned over to commercial family enterprises, thereby restoring material incentives and a correct relationship between the form of property ownership on the land and the technical basis for its exploitation. Trotsky even welcomed Stalin's partial retreat along these lines in 1932 under the impact of the disastrous results of collectivisation.

Next, the stabilisation of currency growth was urgent if real economic progress was to be measured. Thirdly, market-based material incentives (higher wages, choice of goods) were necessary at this stage of the transition if labour productivity improvements were to be sustained.

Fourthly, a complete reversal of the tendency towards economic isolation was needed. Integration into the world market could provide the necessary short-term capital imports that could overcome bottlenecks, allow the undertaking of necessary repairs and satisfy some of the demands of the urban and rural workers.

Underlying all this, the introduciton of Soviet democracy was urgent if all the distortions, blocked channels of information and poor quality control were to be reversed. Of course, Trotsky more than ever understood that all these reform measures were holding measures. They could, if implemented, "abate" and "regulate" the internal contradictions of the Soviet Union's transitional economy, but they could not overcome them. In that sense, real socialist transition would only start, for Trotsky, with successful revolution(s) in the industrialised countries of the west.

By the end of the FFYP (1932/33) Trotsky realised that the social upheaval caused by command planning turn had caused resentment and opposition from within the bureaucratic caste. After the Congress of Victors in February 1934, Stalin's position appeared weaker. He had lost his post as Secretary General and Kirov had gained most votes in elections to the party leadership. This led Trotsky to speculate on the possibility of Stalin being removed altogether and the LO being readmitted to the Party.

However, after the assassination of Kirov in December 1934, Stalin reasserted his control and secured his position by unleashing the Great Purge. In 1936, Trotsky penned his most rounded indictment of the system of Stalinist command planning, drawing on and systematising many of the ideas he sketched during his years of exile.

Trotsky proved that the self-styled socialist character of the USSR was nothing of the sort and concluded that the social character of the USSR was of an economy transitional between capitalism and socialism. One resounding conclusion stood out; economic reforms could only conceivably be implemented on one condition: the Stalinist caste must first be forcibly overthrown through a renewed proletarian political revolution. This was an absolute pre-requisite for opening up the blocked transition to socialism. Anything short of this would lead to further crises, an erosion of the foundations of socialism and the eventual overthrow of the socialised basis of the workers' state.

Having traced the evolution of the Soviet Union and Eastern Europe, as well as the intellectual debate surrounding planning and market socialism, we can now answer the question, "was Trotsky a market socialist?" in the negative. Centrists such as Ernest Mandel have argued that in some senses Trotsky anticipated the market reform movements of Gorbachev and others.

This is false to the core once we recognise what the essence of market socialism is. Whatever else divides them, all market socialists insist on the need for capitalist competition between individual enterprises on profit-making lines, as well as on the autonomy of decision-making over what products to produce. Trotsky specifically opposed such ideas and after 1933 argued that the break-up of industrial trusts into competing units was a sign of economic crisis and breakdown within a workers' state and prefigured a return to capitalism. It could only mean, for Trotsky, introducing disequilibrium and anarchy into the plan.

Trotsky's views on the role that the market was to play in the transition were governed by some general principles and some concrete observations about the starting point presented by the Russian economy in the early 1920s. There could be no market regulation and generalised market relations since this would imply a market in labour power and exploitation; this contradicts the transition to socialism.

Nevertheless, it was impossible to eliminate the market at the outset in any society, least of all Russia. Hence, the market must be recognised, regulated and manipulated in the service of strengthening the socialist character of the economy. So long as scarcity was generalised, some mechanism for the

regulation of scarce goods was needed. This effected consumer goods most of all. Here the use of money and prices that accurately reflected the amount of social labour used up would be the best mechanism for regulating supply and demand and transmitting consumer preferences to the producers.

Concretely, in the USSR, the vast mass of consumer goods of the workers were obtained in the private sector (from peasants) and this dictated that prices and markets would be the best way of workers exercising their pressure upon the rural economy.

Moreover, given the backward character of Russia at that time, Trotsky thought that an extension of the market and commodity relations into large parts of Russia, relations that up to then had depended on non-monetary exchanges, would be a step forward. Social labour, measurable by the law of value, was superior to subsistence and semi-feudal economies.

Yet the general tendency during the transition must be for the market to be eliminated over time. Specifically, as agriculture became industrialised and the peasants transformed into workers, the plan would directly influence production and absorb the market, not merely regulate it. Using the market to "verify the results of the plan" (Trotsky) was a historically specific law that reflected the predominantly private character of labour involved in the production of consumption goods.

As social labour came to predominate in this sector too, *a priori* calculations of goods destined for final consumption would also be possible. Consciousness would be put in command of this sector and the contradiction of "planned production for an unknown market" (Mandel) would be eliminated. The construction of a decentralised national plan, responsive to the changing and varied consumer preferences of the mass of workers, would make market verification, that is, *post-festum* verification, unnecessary and wasteful.

The economics of blocked transition

The contradictions of command planning

The command economies of the USSR and Eastern Europe failed the test of history and their political regimes collapsed under the challenge. Elsewhere (Cuba, China, Vietnam, Cambodia), the political leadership is trying to preserve its power by itself overseeing the transition to capitalism.

The system of command planning that originated in the Soviet Union in the late 1920s failed to outstrip capitalism on a world scale. This was not due to some "original sin" of overthrowing the market. It was due to the attempt to plan economic resources while depriving the working class of means of determining the plan; it was due to the distortion of planned economic relations by an all-powerful, bureaucratic parasitic caste which plundered the economy for its own enrichment.

The bureaucratic command economy could not have arisen without both the overthrow of capitalism and the political defeat of the working class in whose name the bureaucracy lyingly claimed to speak. Whether this occurred as a result of the degeneration of a healthy workers' state and a political counter-revolution, as in the USSR, or the construction of a workers' state degenerate at birth, as everywhere else, does not alter the fundamental dynamics of the economic relations.

While there are many culturally and historically specific elements in the economic experiences of the diverse Stalinist states, nevertheless, there is an underlying unity, a lawfulness, which can be seen to lie at the heart of command planning. Each of these states, by expropriating the private property of the capitalist class, by instituting a monopoly of foreign trade and by erecting agencies for co-ordinating production and consumption, established some of the objective pre-requisites for any transition to socialism.

They ended the regulation of economic life by means of the operation of the law of value. These measures were all historically progressive and had to be defended from being overthrown by inside or outside forces.

However, by denying the working class the right to rule directly and to manage production for itself, the transition to socialism was blocked and this gradually undermined the effectiveness of the original conquests. The working class—despite any initial enthusiasm to set about achieving the economic targets—was more and more alienated from its "own" relations of production.

The laws of motion of command planning flow from the bureaucracy's determination to achieve the maximum rates of economic growth in self-imposed isolation from the capitalist world while co-ordinating the various parts of the economy by means of administrative levers.

All the results of command planning stem from the political calculations of the ruling caste, at the heart of which stood the Stalinist Communist Party. This party was the glue that held all parts of the political and economic apparatus together, despite the sectoral and even factional conflicts that arose.

What then explains the forward dynamic of the bureaucratically planned economy? With the overthrow of capitalism the incentive of profit maximisation by individual risk-taking private owners of capital ceased to operate. But, given the political defeat inflicted on the working class by Stalin, the consumption needs of the working class could not provide an alternative mainspring for the planned economy. Rather, the dynamic was provided by the need for the caste to build a strong economy in order to strengthen itself and even legitimate itself in the eyes of the people it claimed to represent.

Most of the degenerate(d) workers' states originated out of backward capitalist countries surrounded by hostile capitalist states. The ruling castes drew up their economic plans with a view to maximum rates of accumulation (investment), oriented towards heavy industry and armaments. Hence, all degenerate workers' states had consistently higher rates of accumulation than capitalist countries (as proportion of national output).

The investment programme was carried out by means of a centralised plan. There were many different types of plan. The most important were the annual and five year plans; for operational purposes the most important was the one year plan. The five year plan was more indicative than directive, except for the new investment projects that began with the opening of a new five year plan.

The bureaucratic plan typically had seven parts. First, aggregate production figures for the main sectors of production were drawn up (industry, agriculture, transport etc.). Secondly, targets for priority products were set in physical units and uses for them (e.g. semi-finished products) were established. On this basis, material balances were then constructed; on the one side were laid out all the sources and on the other side all the uses. This provided the central guiding methodology of the central plan— a system of material balances whereby a painstaking ongoing process of negotiation would lead to equilibration of the balances.

Thirdly, the manpower requirement for all sectors was set out together with the aggregate size of the wages fund. Fourthly, an investment schedule was laid out, both aggregate and sectoral. Fifthly, targets would be set for technical development. Sixthly, foreign trade projections would be drawn up and, finally, the financial targets would be set (state budget, prices, money supply).

Individual members, as well as factions, of the bureaucracy depended for their recruitment, promotion and enrichment on the success of the plan. They did not enjoy property titles which gave them a legal right to a portion of the surplus. Their success and power depended upon plan fulfilment. There was thus an inbuilt tendency for all sectors of the bureaucracy to expand the productive forces under their control on a quantitative basis and without regard to quality.

Empire building brought with it an increase in power and the size of the rewards. In turn, this mainspring of growth brought with it one of the defining features of the command economy—permanent investment hunger. Inevitably, this was associated with a permanently depressed level of consumption by the working class. Current consumption was always seen as a deduction from potential investment.

The method of plan co-ordination and formulation was entirely bureaucratic. Under a healthy workers' state, the working class must provide the subjective direction of the economy. In the command system of planning, by contraast, the bureaucracy treated the working class as an object of the plan—along with the other factors of production.

The subjective desires (demand) of the mass of producers and consumers were ignored. The central planners and party leaderships drew up the plan targets on the basis of past plan results, the appearance of shortages and political imperatives (e.g. war needs, responses to internal economic/industrial unrest, factional pressures within the bureaucracy).

Plan targets were then disaggregated by lowers levels of the apparatus and for each level the received target had the effect of a command. All decisions on plant start-ups and closures, on promotion and appointments, on rewards and on material allocation were taken by an unaccountable bureaucracy. Horizontal links did exist but they were links between sectors of the bureaucracy; ongoing co-ordinations between directorates, between enterprises that supplied and used a product.

This system of planned accumulation worked, but not efficiently. The most important priorities were achieved, but after many delays and disruptions to other sectors deemed not to be priorities. Wherever planning served the direct needs of the bureaucracy (e.g. defence and related sectors) it worked best as well as where quality considerations were least important.

The system of bureaucratic planning, however, had inbuilt deficiencies which, in the absence of competition and market co-ordination, could only be remedied by working class management of the economy. Moreover, only the latter course of action was compatible with the transition towards socialism. This was unthinkable for a caste which only survived by denying the working class the ability to rule directly and whose very existence was incompatible with socialism.

The bureaucracy proved itself, after initial impressive results, to be more of a burden on the planned property relations than a spur. Unlike a class, it had no necessary role to play in the given system of economic regulation. Its existence obstructed capitalism certainly, but its role as a separate stratum, raised above the direct producers, was not essential for the formulation and implementation of a plan.

Because the bureaucracy was not a coherent class it often needed to subject itself to bonapartist rule to keep itself together; this in turn further obstructed the formulation and execution of a rational plan. During the course of the twelve Five Year Plans in the USSR (1928-90) and throughout similar plans elsewhere, the bureaucracy's existence became increasingly injurious to the performance of the plan. Plan after plan registered declining growth and productivity rates—both directly attributable to the bureaucracy's role in planning

Initial economic results of the command economies were impressive, as the centralisation and co-ordination of economic resources pulled the countries out of extreme backwardness. But these results were despite, not because of, the bureaucracy's contribution. These were decades of extensive growth, that is, when the growth in the stock of machinery and labour grew absolutely and output grew in proportion to them.

At the onset of planning, there was massive unemployment which could be absorbed to draw more and more people into the labour force; there was a parallel growth in cultivable land. Most countries also had plentiful natural resources to exploit at the start. Added to this, the length of the working week was universally increased—labour being more plentiful than fixed assets, assets could only be kept functioning by maximum shifts.

In these years, the co-ordinating and centralising role of administration—taken together with the enormous natural resources to be pulled together and exploited and the undoubted enthusiasm (at least in the USSR) of the masses for economic construction — accounts for the achievements of the plan.

As these reserves of labour and raw materials were exhausted, or where command planning was imposed from the outset upon an already developed, even imperialist economy (e.g. Czechoslovakia) then continued growth depended on increasing the productivity of existing factors of production.

This would have required a system of material and moral incentives alongside technical improvements to the labour process and the more efficient use of existing materials. At this point the disruptive and negative effects of an unaccountable bureaucracy came to be decisive.

In general terms, the limitless appetite for investment by the bureaucracy contributed to the first negative effect on productivity. The generalised investment shortage ensured that there was a de facto system of priority allocations to sectors under the control of the dominant factions or sectors of the bureaucracy. As a result, these areas of industry secured a disproportionate share of available investment. In comparison to the rest of the economy this represented overaccumulation and wasted investment and led to chronic disproportions in the economy as a whole. This, in turn, led to dislocation, unfinished projects and lower efficiency.

In a democratic transition to socialism, where the working class rules directly, this problem would not arise since investment rates would be determined according to what is optimal across the economy as a whole. That is, what is the most efficient combination of resources, taking into account the need for balanced growth, rising consumption levels, the various alternative uses for the same factors of production and the social costs involved.

As regards material incentives, in the transition to socialism the working class has an interest in economising on labour time in order to shorten the working week and increase the time available for education, leisure and for political participation. This played no role under the conditions of blocked transition in a degenerate(d) workers' state.

The incentive structure only applied to members of the bureaucracy (and a small layer of labour aristocrats) and even here it appeared differently to different layers of the bureauc-

racy. The top central planners and party leaders had an interest in aggregate targets being met for the economy as a whole. Enterprise managers, on the other hand, had an interest in fulfilling their specific factory targets. By exaggerating their needs for investment resources, by underreporting achievements where they exceeded the plan targets, this layer of the bureaucracy retained maximum room for manoeuvre. In particular, they avoided having their plan targets "ratcheted-up" in the next round. All this inhibited the productive employment of resources.

Likewise, there were real barriers in the way of a more efficient use of labour. In a system governed by the need for a maximum rate of accumulation, the shortage of labour (full employment) soon became permanent and even ideologically sanctioned (the right to work). In the bureaucratically planned economy labour power was not a commodity since there was no reserve army of labour and aggregate wages were set in advance (according to the macro-economic targets for investment and consumption). They were the most rigidly observed part of the plan.

Some market price setting existed as regards the level of wages for different occupations or regions of the country within this overall allocation of the wages fund. Workers had the right to move jobs but found many obstacles placed in their path. Meanwhile, enterprise managers had an interest in securing as many workers as possible and were wary of losing them. This overall situation ensured poor rewards for labour, relative labour immobility and minimum threat of being sacked. Lack of real trade union rights also made more political forms of protests impossible or difficult. What transpired was a regime of low moral and poor labour discipline and resulting low productivity.

Nor was this compensated for by more efficient use of materials. There were no rewards nor penalties for the optimum use of resources but there was much to be gained by stockpiling goods which might, or might not, be used if the plan targets were raised or unforeseen disruptions occured during the planning period. Since there was no market discipline on the one hand, nor daily working class pressure on the factories to deliver quality products at a declining average costs on the other, this process went unchecked.

There was, nonetheless, a tendency within the system of command planning for technical improvement of the labour process itself. Enterprises responded to labour shortages (not as under capitalism, the increasing relative cost of labour) by substituting machinery for labour. Technical improvements were, therefore, made but they were usually imitative of capitalist innovations and applied after long delays.

A general tendency to improved productivity would demand a reliable and constant form of measurement of productivity gains, and hence of costs. Here again, the bureaucracy's self-interest impeded this. In the first place, command planning relied in general on quantitative indices (physical units) rather than value indices. Not only were these easier for the caste to control and follow through the system, but they also corresponded to their caste interests; quantitative expansion led to a steady increase in the organisation and numbers of bureaucrats. Expansion based on qualitative improvements in productivity would have led to a paring down and reduction in management—something directly inimical to their interests.

This fixation with quantitative indices of growth and success allowed no real comparison of the costs of alternative uses of the factors of production. Neither could it determinewhether declining or growing amounts of socially useful labour were embodied in the same amounts of physical products (use values). The very obsession with quantitative results also led to the neglect of the quality of the product (does it work well? does it work at all?) which had immediate implications for overall productivity if the product was intended for us in the capital goods sector.

The pricing system in the bureaucratic plan reinforced this. Prices were administrative accounting devices and did not reflect real costs of production (i.e. social labour time embodied in them). In part this wass because the bureaucracy held down the level of prices for decades for fear of inflation and refused even to let them move in line with the increase or decrease in costs. Prices passively followed the quantities of products through the planning system as a financial reflection of the system of material balances.

The system of bureaucratic planning, then, suffered from a secular decline in productivity; but within this decline it is also possible to observe cyclical fluctuations. In the first place, the pace of work rose towards the end of a plan period (particularly the annual plan) due to the incentive system attached to the annual plan's completion. Simultaneously, quality suffered at the end of a plan period, sacrificed to rushed production. By way of compensation, there was often bunched investment at the start of the next planning period in an attempt to complete unfinished projects.

Within the plan period, there was a natural tendency for investment plans to be at least partially met at the beginning of the plan period. But, when it became clear that the plan grossly overestimated the capacities and reserves in the economy, shortages appeared. The central apparatus responded by shifting resources away from non-priority sectors to priority sectors with the inevitable resulting effects: unfinished projects, long delays and the disproportions that resulted from them.

In essence, the origin of the cycle was the opposite to that under capitalism. Under capitalism, the cycle of expansion and contraction is due to overproduction of capital and commodities. This causes in turn a destructive rivalry between commodity owners which leads to the elimination of some of them. In the command economy, it was a crisis of excess (investment) demand which, at a certain moment could not be fulfilled, which caused cuts-backs and reallocations. Since every adjustment to the plan had knock-on effects elsewhere in the plan, the overall effect was disruptive.

Finally, however pervasive the plan's aspirations and however bureaucratic and rigid its implementation, the very structural crisis created by a bureaucratic plan called forth market mechanisms to plug the gaps left by a partially failed plan. Sometimes this was a legitimate sector of private producers (e.g.. small farmers, providers of personal services), more often it was a network of black or grey markets. Material in short supply could be located by personal contacts, secured by bribes or by barter arrangements. While not constitutional, these were often institutionalised and part of the labour force (in the Soviet Union, the *tolkachi*) was even set aside to specialise in this task.

In the absence of democratic accountability, semi-official market correctives had to be relied upon to correct the mistakes of the "omniscient being" that was the central planning apparatus. In time, the deficiencies of the planning system, the pressures from within and outside the apparatus for reform combined to force the bureaucracy to experiment

officially with more far-reaching market reforms in an attempt to dynamise the economy.

Market reforms of command planning; Hungary and Yugoslavia

The first attempt to enliven the plan with market mechanisms came in Yugoslavia in the early 1950s. Further versions of market socialist reform came in Czechoslovakia (1958), GDR (1963), USSR (1965), Czechoslovakia again (1968), Poland (1960s) and Hungary (1968). Finally, in 1985, in the USSR, a further and final attempt was made. Political resistance from factions of the ruling party or from enterprise managers brought most of these reforms to an abrupt halt. Only in Hungary and Yugoslavia did the reforms take root.

The New Economic Mechanism (NEM) in Hungary began in 1968 and persisted until the late 1980s. The motive for reform was not, as in Yugoslavia, (or Czechoslovakia) to devise a "new model" of socialism, but simply to increase economic efficiency. The reforms had several components.

New forms of property were allowed, including private co-operatives and small enterprises; obligatory central planning targets were abolished along with physical allocation of output and input; firms were allowed to enter into binding contractual relationships with each other and to operate on the basis of profit maximisation; hence they were responsible for controlling their own costs and setting their own prices.

Competition was intended to lead to innovation and increased efficiency. The macro-economic results of these reforms were not significantly different from those in countries that did not introduce meaningful market reforms. Gross Domestic Product did grow between 1968-75, which was an improvement on the first half of the 1960s, but decline, and even stagnation, set in between 1975-85. Improvements and declines in productivity mirrored these changes in overall growth.

The reforms did result in a marked increase in inequality of income as well as an increase in the volume of consumer goods and greater variation in them. As a result of the later decline in growth, and the persistence of income inequality, a much longer working week (i.e. two jobs) was more common in Hungary after 1975 than elsewhere in Eastern Europe.

The reforms then, failed in their essential aim of increasing economic efficiency. This was because the market reforms were both too little and too much. The reforms did not transfer control over the economy to the working class so that productivity and innovation could flow from this.

But neither did they allow competition between enterprises to develop to the point where efficiencies were generalised through the whole economy by driving the least productive out of business; or to the point where the market in products was extended to the market in capital goods (or capital) so that the dynamic could penetrate all economic sectors.

Instead, in a system of "dual dependence" (upon market and plan), the key determining elements remained the central planning agencies; direct bureaucratic control gave way to indirect control. Instead of compulsory target setting using physical indices, the planners used financial instruments to execute the plan.

This central control was effected in other ways too. At enterprise level, although formally masters of their own output, the managers would have to comply with "requests" to fulfil orders for export or even domestic demand. In addition, a system of quotas and licences set parameters within which supplies could be obtained "freely".

While the price system was liberalised, some direct price fixing always remained and intended price changes had to be notified to the central authorities. Crucially, factory employment levels and access to credit for financing plant investment were all subject to political negotiation between the enterprise managers and the central authority. Real power over the accumulation process remained with the planners.

While market based criteria for output were introduced (e.g. profitability), final market discipline was lax or non-existent since, in the end, systematic loss-making would not automatically lead to closure any more than long term success would lead to being able to retain profits.

Taxation and budget measures would be used as macro-economic levers by the central planners to redistribute success and failure generated at the micro-economic level.

Yugoslavia

Between 1952 and 1965, the Yugoslav workers' state organised its economy around a mixture of plan and market much as has been described above in the case of Hungary under NEM. Between 1965 and the early 1970s, however, the Yugoslav bureaucracy went much further down the road of market reforms than any ruling caste before or after. Indeed, in some respects the "neither plan nor market" mixture that prevailed in those years (prior to a partial recentralisation after 1971) had similarities with the political economy of the moribund workers' states in eastern Europe and the ex-USSR after 1989.

There were three key additional reforms introduced in Yugoslavia after 1965. First, the central state planning authorities relinquished direct control over the banks and the allocation of investment funds (save a residual role in the allocation of funds to underdeveloped regions).

Instead, autonomous banks were set up with the enterprises themselves being the major depositors and voting directors.

Secondly, the state decreed that the focus of all economic decision making over production (and distribution of their revenues) would be the self-managed enterprises. These would be completely free to make contracts with whoever they liked.

All investment decisions were to be taken by enterprises (including investment in other enterprises in other Yugoslav republics) subject to available capital, lent by banks.

Thirdly, the federal state abandoned the state monopoly of foreign trade, leading to a huge increase in commodity imports, joint ventures with imperialism and the emigration of Yugoslav workers. Prices of both imports and domestic goods were set free to rise towards world market levels.

These measures, together, with currency devaluation and the resulting growth in exports, were to provide the main stimulus to expansion and efficiency.

The result of these reforms was that there was no effective co-ordination of production and distribution by a federal authority at all. On the one hand, the banking reforms led to an explosion of available capital for investment.

Since the enterprises were the main owners of the banks, and there was a ceiling on interest rates, this created, by a different mechanism, the permanent demand for investment that is typical of bureaucratically planned economies.

On the other hand, the system of self-managed enterprises enshrined the right to work and made it practically impossible to sack workers or to close a factory. In these conditions, massive excess capacity built up, as did commercial losses.

Market reforms in Yugoslavia did nothing at all to enhance productivity, even compared to elsewhere. During 20 years of reform, productivity declined by half, mainly due to the poor effectiveness of new capital investments.

Inflation rose as a result of the market reforms, from less than 4% in the 1952-62 period to nearly 30% by the early 1980s. This was due to excessive expansion of credit to finance production. In the face of rising inflation, workers in the self-managed enterprises sought protection by devoting a considerable portion of net revenues to wages rather than investment, thus increasing the demand for external credit.

Unemployment rocketed because the federal state abandoned responsibility for finding work and existing enterprises were reluctant to take on new labour as it came onto the market (especially peasants from the countryside) for fear of spreading the wages fund too thinly over an enlarged workforce; mass emigration resulted.

Finally, the reforms led to gross regional inequality as investment went to the more developed regions, leading to the economic dislocation of the country and preparing the way for the break up of Yugoslavia in the later 1980s.

By relinquishing all direct, and much of the indirect, bureaucratic regulation of the economy, the federal Stalinist bureaucrats in Yugoslavia contributed much to the disorganisation and chaos of the country.

The market reforms—in the context of the remaining restrictions on enterprise closure and sackings, the disincentive to efficient use of investment and the absence of rational pricing of capital goods (including the price of capital)—only served to destabilise the economy further.

The reforms introduced large regional disparities, mass unemployment, emigration and rampant inflation. Finally, they exaggerated the secular decline in productivity inherent in the bureaucratically planned economy rather than reversing it—thus thwarting the very reason for undertaking the market reforms in the first place.

The social and economic crisis prompted by the reforms after 1965 caused huge social unrest (1968-71), student protests and worker solidarity. The incoherence of the reforms could not be allowed to stand.

Either the road to full capitalism had to be taken through privatisation, an end to self-management, liquidation of the main loss makers, a deflationary monetary stabilisation policy and commercial credit policies or there had to be some reversal and recentralisation of the plan.

In the mid 1970s, an element of centralisation was reimposed to stop the slide. The centre took more responsibility for rationing investment funds. The federal and republican governments also drew up a system of contracts between enterprises and various state bodies to give some direction back to production.

But the damage had been done. A large measure of dependence on international trade with capitalism, a growing debt burden to service and further regional inequality ensured that there was no end to the economic crisis. When Stalinism collapsed after 1989, states like Slovenia and Croatia were among the first in the queue demanding full capitalist restoration.

Is socialism possible?

The neo-liberal critique of socialism

In the inter-war years an attack was mounted by the Austrian school of neo-liberal bourgeois economists (e.g. von Mises, Hayek) on the political economy of socialism. Following hard upon the experience of war communism in Russia, Hayek and von Mises argued that it was impossible to organise a rational economic system without the full use of money, competitive markets and prices.

Hayek argued that socialism had no economic answer to "the general problem which arises everywhere when a multiplicity of ends compete for a limited quantity of means". For Hayek, this problem can only be solved in a blind fashion as a result of the unplanned outcome of competing decisions by individual and atomised producers and consumers in the market place.

Since, for Hayek, "value" has no objective foundation in labour, it can only exist in the subjective evaluation of the usefulness of a product to various competing consumers and producers. These colliding evaluations are co-ordinated by the market price system which sends signals to all consumers and producers about the relative value of goods. As a result, a central plan, devoid of such a price system and market, cannot evaluate what is the most rational use for scarce economic resources.

A system of private property in the means of production was seen as essential by the Austrian school so that the chance of profit on the one side, and the risk of failure on the other, could propel decisions. These decisions alone could stimulate innovation and enhance labour productivity.

Hayek's criticisms were initially of a theoretical character. In the early Thirties, however, he argued that the experience of the Soviet Union up to that time backed up his argument. He claimed that the USSR chronically under consumed, given the level of savings, and that a capitalist system in Russia with that level of savings would have provided a higher level of final consumption. Further, he argued that the failure of war communism and the subsequent embrace of markets under NEP, followed by the difficulty of realising the goals of the First Five Year Plan, all indicated the inability of any central plan to provide a rational alternative to markets.

The Austrians also insisted that planning was incapable of solving the "informational problem" that was solved automatically by markets. The millions of goods that existed were all different from each other, even the same types of goods were in different states of wear and tear. Moreover, technological improvements occurred incrementally and repeatedly. In short, no central plan could possibly collate and co-ordinate the necessary information to make operative plans work. Even if the information could be gathered, it would require a set of equations of such a magnitude that to formulate a plan would remain beyond the scope of mathematical science. Any attempt in that direction would necessarily lead to a reduction in labour productivity as compared to capitalism.

During the course of the debate, Hayek shifted the weight of his argument to suggest that a system of inharmonious competition between rival private property owners was the only way to respond to necessarily fragmented knowledge about product improvements, demand and similar factors. He accepted that in a static system of demand and supply and of equilibrium prices (an assumption of neo-classical bourgeois economists and, he claimed, of socialist economists) it could be possible to solve the problem of information. In a dynamic, ever-changing and competitive system, however, the problem would remain insoluble.

In this sense, the Austrian argument is not about whether or not information can be gathered to make allocation possible, but rather that competition and rivalry (and the changing knowledge which arises from this and is ultimately collated via the price system) is the only way to ensure entrepreneurship and economic progress.

The Marxist response to these ultra-free market views of the Austrian school has to start from a critique of their methodological assumptions about the nature of economic life. Hayek adopts the standpoint of extreme individualism and subjectivism. Moreover, consumer needs are seen as the driving force of all economy. All of economic life is reduced to market exchanges between free and equal private property owners.

Marxists do not deny the importance of market relations in economic life, but it is simply wrong to suggest that market exchanges account for the key dynamic that determines the allocation of economic resources in a capitalist commodity economy. Marxism provides an alternative account of economy which insists on the historical and relative character of economic laws not on their timeless and a-historical application.

Hayek's extreme subjectivist account of economic forces naturally clashes with the reality of capitalist development. For Hayek, market prices contain all the necessary information needed for private commodity owners to make rational decisions about resource allocation but this is patently at odds with the way capitalism works.

Prices are not parametric for all consumers (i.e. given and unchangeable). Much production (e.g. defence procurement) is undertaken only after tendering in which nature and quality considerations of the commodity are decisive and the price is then given for that specification. Moreover, contract, reputation and delivery times effect consumer choice as much as,

if not more than, price. As for Hayek's suggestion that entrepreneurial risk-taking provides the main dynamic for economic progress under capitalism, it is only necessary to contrast the real character of innovation and technological progress with Hayek's 19th century caricature.

Under the sway of imperialist multi-nationals, innovation primarily takes place within the confines of huge monopolistic corporations. Sometimes they suppress innovations if they endanger profit margins of market share for established products; always research and development is aimed at minimising risk and forestalling competition..

Hayek operates with an absurdly unrealistic concept of perfect competition in which there is free and unrestricted entry into and out of markets for producers and each entrepreneur has command of all the essential knowledge needed to make a rational decision of economic choices, at least for that individual.

In reality, the fragmented knowledge of the individual in the market is only a partial and inadequate guide. It is impossible for any individual to be aware of important and possibly decisive public and social facts that will effect the rationality of their own individual decisions. The effect of a decision over the siting of public infrastructural developments near a town or factory cannot be foreseen. The effect on one individual of a decision taken by another may, in turn, alter the assumptions under which the first decision was taken.

In particular, competition between egotistic rivals in the market place, guided by current prices, cannot lead to optimum use of society's resources when it comes to investment and accumulation, that is, future production, since it is beyond any one individual to calculate future price movements that will render current decisions about investments rational or not.

So, the fragmented character of knowledge and its unforeseen trans-individual or social costs can render economic decisions wasteful in that resources are needlessly duplicated or in that output finds no final consumer. Atomised decision-making is irrational in that it inhibits economic progress. All these criticisms of Hayek's economic model come back to the same point: he makes a false (idealistic) abstraction about the nature of economic life and rather than generalising out of the real class character of production under capitalism does so out of the one-sided nature of individuals in the process of exchange.

It has to be added that Hayek is also guilty of an idealistic abstraction about human nature in general, which is in full contradiction to all the results of modem psychology and other social sciences. Hayek portrays human individuals essentially as fully developed bourgeois: independent from other individuals, sovereign in their decisions, judging all human relationships only according to the exchange value that others command, acting solely in the pursuit of individual material interests.

Direct human relationships (as opposed to exchange oriented ones), based on trust, solidarity or love, do not figure in this abstract concept, or are, at least completely separated from the "economic sphere". Therefore, for Hayek, capitalism not only fits human nature, but is nothing less than the realisation of human nature.

It flows logically from this that there cannot be any other social system that corresponds more pefectly to human nature than capitalism. Of course, it is true that capitalism, its ethics and morals, drives deep into the social and psychological make-up of individuals. Moreover, human relationships under capitalism are under pressure to conform to the exchange relation model. But it is completely untrue that all this is in harmony with human nature.

Quite the opposite, in fact. Human beings are in need of directly social relationships, if they are to realise the potentialities of their personalities as fully as possible. They need social relations that express the full range of human sentiments and qualities, not merely the narrow conception of human "worth" as established by the cash nexus of the market. This, of course, is not so damaging in the case of bourgeois property owners, as the (successful) capitalists can build their psychological strength and health on the social power that their capital represents. Because the social power of capitalists is magnified by the hidden unpaid labour of their workers, capitalists find themselves compensated for capitalist alienation.

In contrast, the workers are denied their opportunity to contribute to social and historical development. Their personalities are impoverished by exploitation and oppression. The increasing amount of psychological. and psychosomatic ailments within the working class is, in the last analysis, the result of the destructive effect of capitalism upon human relations.

Market socialism; new utopias for the new millennium

The early phases of capitalist development in the first half of 19th century produced ideologies that criticised the effects of the new system without going to its roots. Fundamentally, of course, these ideologies represented the class point of view of the petty bourgeoisie but, short of a scientific alternative, wide layers of the working class and the emerging workers' movement also fell prey to them. This was the age of utopian socialism which became more influential after the demise of the French revolution. Owenism, Proudhonism and the German True Socialists, focused their attack on the money system, the introduction of paper money, the expansion of credit and the scandal of interest payments, or simply criticied prevailing inequality and injustice.

Utopian schemes for labour money or workers' banks were drawn up, but the essence of capitalism, the exchange of privately produced commodities, including labour power, and the law of the self-valorisation of the value, that comes out of this, were never understood and could not be. The authors of these early versions of "market socialism" were "friends of labour", but clearly defended the property owning classes. Owen, for example, welcomed "the military force of the French government" to suppress the June 1848 Paris revolution. Proudhon supported the butcher of the French workers, Cavaignac, in the December 1848 elections and later applauded the coup d'etat of Louis Bonaparte.

"Market socialism", then, has a long intellectual history. This century it re-emerged as a critique of economic planning in the USSR. The first writers argued, correctly, that early Soviet assumptions regarding planning and attempts to abolish prices and monetary calculation from the outset of the socialist transition, were wrong; on the contrary, these market indicators could not be replaced by "natural" indices of the use of social labour (e.g. energy consumption).

In polemic with free marketeers, market socialists in the 1930s such as Oscar Lange focused on how prices could be set for all possible goods in the absence of a market.

The answer was that the market had to be mimicked for investment goods (trial and error system of price setting by the planning boards) and the market itself used for establishing the prices of labour and consumer goods.

The next stage in the market socialist debate arose out of attempts to reform bureaucratic command planning in the degenerate workers' states (e.g. the later writings of Lange, the ideas of Brus in Poland and Sík in Czechoslovakia, the experience of self-management in Yugoslavia 1965-71 or the New Economic Mechanism in Hungary after 1968; in Britain the arguments of Alec Nove). What is common to these theories is the advocacy of market mechanisms such as enterprise autonomy or profit-maximising behaviour in order to correct the increasingly apparent tendencies to stagnation, limited consumer choice and a poor record of technological innovation.

Finally, the most recent developments in the debate have advocated the most thoroughgoing use of the market and have stretched the very concept of "socialism" to breaking point. These western social democratic academics and economists have been influenced by the decline and fall of Stalinist planning, as well as the intellectual and policy hegemony of neo-liberal economics during the 1980s and 1990s in Europe and North America (e.g. Roemer, Millar, Le Grand).

At their most extreme, these writers have abandoned any role for central state regulation in any type of production (or even workers' management of the enterprise), including investment goods. Instead, they advocate a free competitive market in setting prices (and thereby supply and demand) for all goods and services (including labour). The claim to be a "socialist" model at all rests on the commitment to a specific form of public ownership of the means of production (citizens' ownership of company stocks) and, thereby, the egalitarian distribution of profits.

Although the camp of market socialists includes a wide variety of specific policy prescriptions and institutional arrangements, they can, in general, be said to accept that competitive markets in a range of goods and some degree of enterprise autonomy from central plan directives are essential if efficiency and democracy are to be ensured. Market socialists accept that there must be no concentrated private ownership of the main means of production—there must be "social ownership".

At the macro-economic level, a central or national planning agency should take (at least some suggestive) decisions about major investments. On the other hand, market socialists argue that jobs and most consumer goods should be allocated via a competitive market. In addition, they insist that operative day to day decisions about output and prices, in effect, all decisions that concern utilisation of existing capacity, should be taken by the enterprises. Some argue that most, or all, investment decisions too should be taken at enterprise level except for public infrastructure projects (transport, communication, education)

For market socialists, individual firms are independent production units. They take autonomous decisions and sell their products on an open market. The utopian character of this scheme is revealed in the fact that modern capitalism—the point of departure for socialism—is not a society of relatively self-sufficient simple commodity producers who sell their small surplus on the market and then buy in those goods they cannot produce for themselves. Rather, socialism inherits a complicated division of labour in which outputs of one firm constitute the inputs of others.

The inter-relationships between self-managed enterprises demands a co-ordinating central mechanism—the direct association of all producers and consumers.

The whole historical experience thus far (Hungary's NEM, Yugoslavia's self-management) suggests that if the curbs on enterprise autonomy are substantial (e.g. inability to sanction investments for additional capacity, inability to cease trading or sack workers) enterprise autonomy does not lead to effective mimicking of competitive markets and the system descends into chaos.

Market socialism is an inherently contradictory combination of economic logics and regulations. Competitive capitalist markets demand a multiplicity of private owners of capital who are each responsible for taking risky decisions about the pattern of investment, about the structure of productive capacity. These decisions have to be taken individually, in broad ignorance of decisions of the other producers and motivated by the desire to maximise profits over the longer term. Only the interplay of these blind impersonal market forces establishes equilibrium levels of employment, prices and interest rates that confront all private capitalists.

By contrast, no form of socialist transition is possible if the social relationship between wage-labour and capital has not been abolished and if labour power continues to be a commodity with wage and employment levels established in a competitive market.

Central directives set by the planning authorities concerning income and employment would be constantly undermined by the decisions taken by autonomous enterprises which were guided in their micro-economic decisions by considerations of profit maximisation.

It would be natural in the latter case that enterprises would be differentially successful. What response should be then forthcoming from the centre when some firms lost out in this competition? What if the goods produced were unprofitable but fulfilled a minority social need? What if a firm sought to shed labour or to close a part of their production in order to get back into profit?

It would be likely from the outset that such unforeseen development would immediately render sections of the plan redundant and throw the rest of the plan into disequilibrium. Further, any failure to stop unemployment or income inequalities between enterprises would contradict the structure of demand envisaged in the national plan and be incompatible with the egalitarian ethos of the transition.

Even the most weakened form of "socialism", which gave the most free rein to competitive markets in setting production and price levels, would still have a core defect; namely, that the collective, egalitarian form of profit distribution and common ownership of property rights would conflict with the mode of production of those profits.

"Market socialism", then, is a late twentieth century form of petit-bourgeois socialism which, in the words of the Russian Communist Party's 1919 programme,"protests against large-scale capital, but it does so in the name of the 'freedom' of petty enterprise" (*ABC of Communism*, London, 1927, p78/79).

In the nineteenth century, this petty enterprise was artisanal in character; today's market socialists preach the freedom of the self-managed or co-operatively run industrial enterprise; freedom not only from large-scale capital (i.e. monopolies and banks) but from central plan directives. We turn now to examine in more detail the arguments and fallacies of key representatives of each stage of market socialist ideology.

Oscar Lange and Fred Taylor

The early defenders of the rationality of socialism, who replied to the criticisms of Hayek et al, mounted their defence from within bourgeois economics and rejected Marxist political economy and the labour theory of value. Naturally, their defence, therefore, could not be consistent, nor can we identify with it.

Taylor and Lange approached their defence almost entirely from the standpoint of the efficiency of socialism. This in turn had two component parts. First, efficiency should be the most cost-effective use of available resources; secondly, the price mechanism must be used to guarantee equilibrium between demand and supply.

For them, "socialism" was nothing more than public ownership of the means of production and an egalitarian distribution of income. They assumed that political democracy would be similar to bourgeois parliamentarism but they believed that their economic model was also compatible with political authoritarianism, such as existed in the USSR.

Lange accepted that Marxism could explain the evolution of society from one class system to another but argued that it could not explain "everyday reality". For him, bourgeois economics "understands static economic equilibrium under a system of constant data and the mechanisms by which price and quantities produced adjust themselves to these data." While Marxism could explain the development of classes in production, the labour theory of value could not explain the distribution of goods and services between individual consumers and firms.

For this they relied on neo-classical marginal utility theory, a branch of bourgeois economics that arose from the 1870s, whose essence was to abstract the working of supply and demand in the market from production. As a branch of economics it revolved around subjective estimation of the value (utility) of goods to the individual. So, the study of the subjective worth of an object to a person replaced the objective study of the social relations of people in the production and exchange of commodities. This theory more and more abandoned the study of "real costs" lying behind production in order to study "utility".

Despite this, Taylor's *The Guidance of Production in a Socialist State* and Lange's *On the Economic Theory of Socialism* were accepted as the most complete pre-war refutation of the Austrian claim that economic calculation was impossible under socialism. They assumed that the means of production were publicly owned but that there was complete freedom of choice in consumption and in the choice of jobs. Taylor argued that the method of allocating goods should essentially be the same as under capitalism. The state would own the means of production and be responsible for distributing income according to the requirements of social justice. Production would be guided by consumers' preferences but these preferences would be expressed by "demand prices" in the market.

According to Lange, production should be undertaken by independent and competing firms but they would have to produce under two "parametric rules" as established by a Central Planning Board (CPB). The first of these rules is that the choice of the combination of factors must minimise the average costs of production, so that the marginal productivity of factors is equalised. (Marginal productivity is the productivity that accrues from adding an extra unit of any factor of production). Secondly, the scale of output should be determined at the level at which marginal costs become equal to the price of the product; that is, when the cost of an additional unit of output is equal to the price, if price is set at average cost plus average profit. When firms operate according to these rules, prices of labour and consumer goods are determined by the market.

Prices of production goods should be set, initially, by the CPB on the basis of a calculation of the costs of a range of alternatives. Given these, the quantities supplied and demanded would be determined. If it transpired that the prices set by the CPB failed to match supply and demand then prices would be adjusted by a system of "trial and error" until they did. Hence, by mimicking the competitive market, the CPB would arrive at demand and supply schedules for all goods and services.

There are many criticisms to be made of the Lange solution, most of which flow from his insistence on abstracting the system of production from distribution. There can be no possibility of overcoming alienated labour or commodity fetishism in this model of "socialism". Human labour, and its all-rounded development, is not the starting point for Lange but, rather, the efficiency of production and the balance between supply and demand. Hence, labour is treated as a factor of production whose price is to be set on the open market, at a level established by firms operating according to parametric rules to govern efficiency.

Moreover, the freedom and sovereignty of the consumer is in fact shallow and limited. The consumer is religiously separated from his or her role as worker and, therefore, cannot influence the production of consumption goods before production, or take any decisions about the introduction of new goods; rather, the consumer is nothing but a passive price taker of a given limited range of consumer goods which they are "free" to buy or not. The fact that a commodity put on the market is sold at a price that covers its costs of production is no proof that it is the commodity the consumer would have preferred given full knowledge of the possible range of alternatives prior to production.

Moreover, the "trial and error" procedure for mimicking the competitive market and arriving at equilibrium prices is a wholly unconvincing model of the way prices are established. As a system, it is based on Walrasian equilibrium theory. This model makes the completely unrealistic assumption that individuals can adjust their plans to produce or consume in response to price signals before they actually buy and sell. In this model, repeated responses to varying price signals reveal consumer preferences and the auctioneer (i.e. the CPB in this case) co-ordinates the process.

The CPB calls out a set of prices and everyone decides who would want to buy and sell at these prices. This information is processed by the auctioneer and then prices are adjusted to bring supply and demand into line. Only then do sales and purchases take place. The problems associated with atomised sequential decision-making are neatly avoided by this process; in short, this process is (falsely) abstracted from real time and hence reality. The model simultaneously presents an unworkable model of the market under capitalism and a technocratic and social-democratic vision of socialism.

Ota Sik

One of the most prominent theorists of market socialism after the Second World War was the Czech economist, Ota Sík. In his 1965 work, *Plan and Market Under Socialism*, he set out his theory of socialist commodity relations. In this work he contested the idea, derived from the work of Marx

and Engels, that commodity production was inherently connected to private property ownership and would, as a result, disappear along with the end of private ownership. He argued that Lenin's recognition of the inevitability of commodity relations in the transition to socialism so long as a large private peasant economy existed was an insufficient recognition of the role that market relations must play in the construction of socialism.

Sík was a perceptive critic of the defects of command planning. To correct them, however, it was important first to theorise the necessity of socialist market relationships, that is, an optimum relationship between plan and market. He maintained that the argument of some reformers that market relations were necessary to make good the deficit of information and knowledge in command planning was wrong.

In principle, the refinement of techniques of planning and overcoming bureaucratism could solve this problem. Rather, he established the case for the market on the basis of a conflict of interest which he claimed existed between the individual and the plan, a social contradiction that could not be eliminated by better knowledge.

The essential nature of this contradiction lay in the lack of sufficient interest by the individual worker in the development of social labour. The requirement of the social plan demands an optimum development of production, a rational use of scarce resources that balances quantity and quality considerations in the labour process. Workers and managers are only interested in the one-sided development of production, not optimum social development.

Command planning focused attention on purely quantitative developments and targets; technical or qualitative developments were neglected or ignored since these inevitably involved short-term lapses in quantitative targets. In general, there was in planning an inherent tendency for concrete labour expended to deviate from socially necessary development.

Workers have to have an interest in the optimum development of production. But how? Moral incentives are insufficient for the mass of workers and the technical basis of work for most workers was such that there was no short-term possibility of transcending the routine and boring character of most labour, hence it could not be expected that the creative nature of the labour process would ensure the coincidence between the individual's interests and those of social development. It was not ill will or bureaucratism as such but the "objective conditions of labour expenditure under socialism" that ensured there would be a conflict of interest.

Hence, producers must have a relationship whereby they each feel the effects of their decisions on each other:

"Any producer who makes a one-sided decision at the expense of the consumers should feel the negative effect on himself as consumer."

These were socialist commodity-money relationships:

"These are the relationships by means of which the interests of people as consumers can constantly influence the interests of people as producers and provide economic stimulus to develop production in an optimum way." Material incentives in consumption are the answer: "it will be necessary to create the economic conditions under which their own material interests will compel enterprises to assure the optimum development of production. These must be relations under which the funds for reward will be enlarged whenever the labour approaches the socially necessary labour or optimum production."

For Sík, then, market relations help to assure that the labour concretely expended in the enterprises tends to be socially necessary. If an enterprise fails to sell its goods at the given prices then the fund for wages must be effected accordingly, thus forcing changes in the labour process of the enterprise. Sík considered this relationship to be necessary not just between firms producing consumer goods and the working class but even in relations between firms producing capital goods.

Despite being posed in Marxist categories, Sík's ingenious attempt to theorise the need for the market has to be rejected. In essence it is little more than the "hidden hand" of Adam Smith (each pursuing their own interests contributes unconsciously to the general interest) recycled for the transition to socialism.

It suffers from a defect common to all market socialist prescriptions; namely, the *post-festum* judgement of the market as to what counts as useful social labour comes into conflict with the *a priori* established judgements of what is socially necessary labour as laid out in the national plan.

If the market is to be the arbiter of what counts as social labour then the plan's targets are rendered meaningless or suspect since these targets, if democratically arrived at, already make a judgement of the social character of the labour *ex ante*.

Sík sees the transition as involving a conflict of social interest between "enterprises" and "consumers". In each enterprise, he argues, managers and workers have an interest in maximising the profit which they can then share. This can be done either by taking advantage of a monopoly position or by using labour and raw materials in the most advantageous combination. In either case, decisions are taken irrespective of whether they benefit the consumer. This counterposition of production and consumption is wrong. The working class is both producer and consumer in the transition. Sík believes only market discipline can ensure that the producer makes what the consumer wants but, in a democratic plan, there need be no such conflict.

Sík is looking at the wrong problem; it is of course possible, even inevitable, that concrete labour in the enterprise will depart from social labour. Under command planning, the problem was that the determination of what was socially useful labour was hopelessly skewed by the bureaucracy's insistence on maintaining a monopoly of information and ignoring the wishes of consumers. Optimum economic development was sacrificed for arbitrary, rushed, purely quantitative (i.e. use-value), targets. Hence, the social character of labour (i.e. does it embody socially necessary labour or not?) was revealed, more often than not, in endemic shortages, leading to wasted and uncompleted projects; or in unsold goods that the workers refused to buy.

In a democratic planning system, the plan will reflect agreed targets for labour productivity improvements and agreed goals for the careful use of scarce resources. Hence, whether or not concrete labour corresponds to social labour will depend on whether the plan targets are fulfilled. If they are not then sanctions can be applied by the democratic plan supervision bodies if necessary; or adjustments can be made to resource allocation.

In Sík's scheme, there is no consideration of what to do if the concrete labour falls short of the optimum development through no fault of the enterprise workers. Why should their remuneration be reduced? Once again, Sík seeks an answer in the market when what is required is conscious working

class direction of the planning process.

Moreover, Sík's advocacy of increased wages for workers in an enterprise that succeeds better than others would be disastrous for the transition to socialism; it would undermine solidarity and enhance inequality. On the contrary, all workers must benefit from enhanced productivity as a result of the lowering of the price of articles of consumption—a collective, class wide benefit and one that more accurately reflects the fact that productivity gains are the results of national collective decisions about investment in plant and equipment rather than individual workers' efforts.

Alec Nove

In the mid-1980s, when the Kinnock leadership pushed the Labour Party to the right under the slogans of "new realism", Alec Nove published his *Economics of Feasible Socialism*. It became the bible of the left reformist intelligentsia who tried to defend the possibility of "socialism" against neo-liberalism by stripping it of any Marxist content. The attempt to harmonise "socialism" and the market was in the last analysis the old desire to conciliate the class antagonisms of capitalism under the auspices of the petty bourgeoisie: "big capital" should be deprived of power but the working class shall not rule. The result is a utopia.

Nove dismisses all allegedly "utopian" elements within Marxist socialism, e.g. the withering away of the state or the concept of "abundance" under communism. He declares parliamentary democracy to the best possible form of state and rejects any alternative state based on a sytem of workers' councils. He claims to be a realist and as such proposes that five types of property should exist, according to their respective advantages for carrying out different tasks.

In the first instance there should be state corporations overseeing the strategic parts of industry, services and finance. They would not be managed by the workforce, but be administratively and financially centralised. Then would come "socialised enterprises", that is, state owned enterprises enjoying full autonomy and a management responsible to the workforce.

They would be medium-sized firms and should cover the bulk of social production and services. They would work under conditions of "benign competition", which he takes to mean that market success would influence the earnings of managers and workers, but the means of production cannot be sold or bought and the state retains a say in the case of any threat of bankruptcy.

Next, small co-operative enterprises, privately owned by the workforce, would be self managed and fully responsible for their own success of failure. Fourthly, provision would be made for small-scale private enterprises, with capitalists allowed to employ no more than, for example, ten workers. Finally, individuals (e.g. freelance journalists, plumbers, artists) could set up as self-employed businesses.

Nove too thinks that centralised planning is *per se* inefficient because of the insoluble informational problems involved. So the "centre" would not attempt to plan the whole economy but would retain certain functions.

Most importantly, decisions concerning strategic investment (e.g. building of new factories, roads, telecommunications). The state banks would also monitor decentralised investment, but intervene only where there was likely to be unnecessary duplication of investment by different private sector enterprises

The national government would naturally run the centralised state corporations and it would define the market rules for the socialised and private enterprises—even intervening in this sector in exceptional cases. Fiinally, the state would promote environmental protection, oversee transport planning, and subsidise scientific research and regional development.

Planning would be confined to long term recommendations on output for the socialised enterprises and the tax system used to distribute income and wealth between accumulation and consumption.

Nove is very clear that such a role for the centre would leave the bulk of the economy to be ruled by the market. Cooperatives and private enterprises should be allowed to go bankrupt. In the socialised enterprises, as well, the workforce would have to "take the responsibility for the management" (and become unemployed in the case of bankruptcy!) except in cases where society has a strong and democratically expressed interest in protecting a particular enterprise.

There would be a few state regulated prices for infrastructural services but most prices would be market prices. Profits are problematic for Nove only if they are privately appropriated, but for the socialised firms they are simply an indicator of efficiency and success. The overall rate of profit for each sector obviously, however, depends on the wage level which, for Nove, should be determined by political and not economic considerations.

In this system, there would be no exploitation, says Nove, as the power to dispose of profits remains mainly in the hand of society (i.e. parliament). Wages should be closely correlated to productivity but, at the same time, there should be legal limits to wage differentials. For Nove, a labour market is indispensable because only wage differentials can channel the labour force to the most efficient uses. Voluntary distribution of labour not only overestimates human altruism, but the individual worker would also have the impossible responsibility of knowing where the socially most sensible workplace for him or her is to be found.

All experiences of self-management show that a lack of interest in the long term well-being of the enterprise emerges when there is no property relation between the enterprise and its workforce. Nove's solution is that there should be an enterprise fund, equally owned by all employees, that grows and shrinks according to the development of business. Any new worker has to buy a share in that fund (if necessary through a loan) and those who leave receive their share, enlarged or shrunken as the case may be.

Through this meachanism, Nove believes, the workers will develop the necessary entrepreneurial spirit to increase production in the case of rising market prices (instead of reducing it to take advantage of temporarily increased incomes) because otherwise their enterprise will lose market share, incomes will fall when prices are coming down and in the long term this will lead to a devaluation of the enterprise fund. To prevent the most successful firms from achieving a monopolistic position, and thereby liquidating the competitive drive, Nove argues that anti-trust laws are necessary.

Business cycles, which are inevitable in market regulated economies, can be prevented, according to Nove. He thinks that credit policy, strategic investment, price control in the centralised state sector, incomes policy and the tax system are the levers which can be used to eliminate the business cycle.

Nove thinks that his model of socialism is the only one that can realistically be put into effect within the next 50 to 70 years in a number of countries. In future centuries, even a

wholly "socialist" world is possible, but international planning is not. External trade will always work on a market basis for Nove.

Having briefly summarised Nove's main ideas, it is clear that he wants to combine social ownership of the main means of production and democratic control of strategic investment and the rate of accumulation, on the one hand, with market regulation of production and distribution on the other. He thinks that this would be a harmonious combination and does not see that within this system is lodged a sharp contradiction. Two modes of economic regulation are set in motion that respectively serve different classes. This sort of mixed economy would generate an intense class struggle.

The system of competition would constantly undermine the politically determined levels of investment, because the survival of most enterprises (and jobs) would depend on their level of investment. Competition would also undermine the level of wages because it would make the drive to accumulate irresistible, which in turn would mean that workers' interests would be systematically subordinated to it. A spontaneous tendency towards open private ownership would emerge in Nove's model of "socialism".

Similarly, the enterprise fund would be the embryo of private ownership in the means of production. Managers would argue (in successful enterprises potentially supported by their workers) that they wanted to invest their enterprise fund to extend or improve the fixed capital of their firm, thereby beginning the process of establishing ownership rights in it.

Other managers would fight for the right to use their enterprise funds as a source of external investment or for loans to other enterprises. Where firms were unable to pay back such loans, the conversion of debt into equity would be an obvious option for the financing enterprise. They would organise politically for these aims, probably together with the small capitalists and co-operatives who would demand a removal of the limits imposed on the size of private capital. In other words a new bourgeoisie, emerging out of the managerial strata would fight first for more rights but, then for their unlimited class rule.

On the other hand, the workers of the unsuccessful enterprises, who would be threatened with low wages and unemployment, would demand state intervention. They would argue that the failure of their enterprises was not their fault but were rather attributable to the objective changes in market conditions (e.g. superior competition from a much bigger company that had been allocated greater investment, or from a more developed country) made their success impossible.

Although Nove believes that state intervention could avert recessions, real life would show that the dynamism of the market is stronger and enterprise failures would be simply the result of declining overall demand. Why should some workers suffer the consequences of "system errors" and not others? Of course, these workers would also politically organise to fight for a generalisation of state ownership, and consequently for thoroughgoing central planning.

Another factor would contribute to an intensification of the class struggle. Under market conditions an average rate of profit is established in the whole economy. As the rate of profit represents the amount of profit per unit of capital advanced, it is independent of the specific amount of labour time extended in individual enterprises.

This means that enterprises with the same numbers of workers may "earn" completely different amounts of profit, depending on the value of the constant capital of the enterprise concerned. If the workers' income, or the share of the enterprise fund are in any way correlated to the profit of the enterprise there would be widely differing wages and/or fund shares. Obviously, those who stood to gain from such a system would be inclined to defend it politically, whereas those who stood to lose would be opposed to it.

The system of competition would constantly undermine the politically determined levels of investment, because the economic survival of enterprises (and workers) would depend on the level of their investment. Competition, therefore, would also undermine the level of wages. Equality would certainly not arise out of such a system.

Nove's "socialism" is conceptually unstable, because it represents a sort of dual power situation. The inevitable political struggle at the hear of such a dual power would have to result in the definite victory of one side over the other. Either the freedom of private ownership would be restored and capitalism regain its full rights again, or the workers would become masters over the market.

Ernest Mandel

Although Ernest Mandel first described his conception of economics under conditions of the transition to socialism in the early 1960s (*Marxist Economic Theory*), he developed his arguments further in the late 1980s through his critique of the ideas of Alec Nove.

He started his *Defence of Socialist Planning* (New Left Review 159, Sept/Oct 1986) by pointing to the "increasing objective socialisation of labour" within "late capitalism". Concentration and centralisation of production have drastically reduced the proportion of labour allocated by the market and increased the share of directly allotted labour.

Similarly, capitalism itself has consistently expanded the planned element in the economy. Nove is wrong to say that only the market can distribute the millions of goods produced and that any planned attempt to do so would inevitably be inefficient and bureaucratic. In fact, private consumers never compare and value "millions of goods" but at most a few thousand in an entire lifetime.

Secondly, lots of intermediary goods are made to order and are not bought on markets. Thirdly, most means of production are not produced for an anonymous market but to definite specifications following a successful bid. Lastly, today's production mirrors a long established pattern of consumption which changes slowly and only over the long term.

Mandel rejected Nove's notion that only the price mechanism can determine the relative intensity of different needs. Mandel's theory of need suggests that there is an objective hierarchy of needs: there are basic needs, secondary needs and marginal (or luxury) needs. In the first group are basic foodstuffs, clothing, housing, education and health facilities, transport and recreational time.

The second group covers a narrower range of food, drink, clothing, household appliances, refined cultural and recreational services as well as private cars. Everything else is luxury. Demand for basic goods is relatively stable and does not grow with increasing income; on the contrary, it tends to fall. Mandel thus claimed to have refuted Nove's expectation of an endless expansion of needs. Rational consumer behaviour would replace an allegedly instinctive wish to permanently increase the level of consumption. Mandel drew two

major conclusions.

First, alongside increasing productivity, the role of money in society would be reduced as ever more goods could be freely distributed without increasing the demand for them. Money is not necessary to mediate between need and its satisfaction, through market research people could simply be asked what they wanted.

Secondly, the subjective basis for commodity production and money circulation would wither away. Competition would remain only in the production of luxury goods and would be much less intense than it is today. Some "tyranny over needs" would exist under socialism as long as secondary and marginal needs could not be completely satisfied but such "tyranny" would be much more justified than that which exists under capitalism.

Mandel argued that neither capitalism nor bureaucratic planning could ever have worked if it were not for what he called "objective informal co-operation". Consumers never simply react to price signals in deciding what to buy. Neither shoppers nor firms switch shops or contractors respectively simply because of small price movements.

Established patterns of co-operation are quite decisive. At the same time, even within capitalism, there are examples (e.g. electricity in many countries) where neither production nor distribution are regulated by prices. Demand is highly predictable in these cases, production is thoroughly monopolised and prices are calculated as cost prices plus predetermined profit margins. Free distribution under socialism would economise on bureaucracy even in comparison to capitalism. Thus Mandel argued that a third way between the blind market and a huge bureaucracy was possible.

Mandel also addressed the question as to whether his stress on "objective informal co-operation" would not lead to the institutionalisation of routine and habit and thereby suppress creativity and innovation. He was convinced that the interest of the direct producers in reducing their workload and improving their environment would be enough to act as an incentive to reduce costs and curb inefficiencies.

People would probably work shorter hours and, therefore, some unnecessary goods would not be produced, but that would not constitute a problem. Socialism is not characterised simply by an increase in consumption but by an increase in civilisation. Mandel has pointed to the fact that lots of inventions and discoveries were made without any commercial incentive.

Competition is not a necessary element of innovation. The deeper impulses for technical advances and other innovations stem from the natural tendency of the direct producers to economise on time, and from human curiosity in general. Equality is no barrier to economic efficiency. Mandel referred in that context to the experience of Israeli kibbutzim, where labour efficiency is higher than in the surrounding market economy.

Mandel has included in his presentation a model of how he thought a socialist economy would work. Yearly national and international congresses of workers' councils would decide on the most central needs of society, on the rate of accumulation and the distribution of the resources between different sectors as well as on the length of the working week. At the same time, the scale of available resources to be distributed via the market would be set for "non-essential goods and services".

On that basis, a general plan would be developed which would relate the necessary in- and outputs to each other. It would not, however, include specific commitments for individual sectors or regions. Instead, the self-managing bodies of those sectors and regions (i.e. the respective workers' councils) would concretise the plan and delegate specific tasks to individual economic units.

In Department I (producer goods) the product mix would be mainly derived from earlier decisions. In Department II (consumer goods) product lines and the scale of production would be determined in collaboration with the respective democratically elected consumer societies. Decisions would be taken with the help of models and prototypes. Market research could take the form of consumers identifying those goods from a range of alternatives that best met their wishes. The results would then guide production. Of course, there would also be some planned overproduction to allow for oscillations in demand.

The workers' councils in factories would be free to decide on the methods of work according to the wishes of the workers. Increases in labour productivity would immediately benefit the workers as long as the quality requirements of the consumer control bodies were met.

Mandel's model assumed that workers would be guaranteed certain free goods and services as a "social wage". Individual money income on top of that would depend on quality indices and work stress coefficients. There would be no barriers to the flow of accurate information about, for example, product quality or reliability because the self managing working class would have nothing to gain from misinformation.

Mandel's claimed that such a system would incorporate a mighty mechanism of self correction because the decision makers (i.e. the workers) would immediately feel the consequences of wrong decisions and thus would quickly detect and eradicate weaknesses and mistakes.

Mandel's work is an important contribution to the case for of planning and against market socialism. He is absolutely right to say that "increasing objective socialisation of labour" means that even under capitalism ever greater parts of the economy are organised according to some plan. Even the neo-liberal privatisation and de-regulation policy of the 1980s and 1990s could not reverse this historic tendency.

Although state intervention has been pushed back in some countries, new waves of capital concentration have taken place all over the world and increased the degree of monopolisation of the capitalist economy still more. The huge economic empires of the transnational corporations do not function internally according to market criteria, for all their introduction of "profit centres" and "outsourcing" of non-profitable components. With strategic investment, research and development of new products, there is still a growing element of planning in the "policy" of the big corporations.

Although there was some deregulation of national non-tariff barriers, and additional competition and market mechanisms were introduced into some sectors of the global capitalist economy, these have not been enough to refute Marxism's contention that there is a long term tendency towards monopolisation and manipulation of markets.

Despite the ideology of neoliberalism deregulation has stayed within definite limits. Firstly, when some non-tariff barriers are removed, others are established. The permanent tendency towards trade war between the major imperialist blocks is a consequence of that. Secondly, prior to the recent move towards "globalisation", there were already world monopolistic structures in some areas and in these market

competition obviously could not simply be created by order.

Thirdly, even where competition has been created, its inexorable consequence will be, as it always has been, that successful companies will force out or take over unsuccessful ones. What has changed is that this will now be on an even more global scale than in the past, precisely because of the "opening up of new markets". Mandel is, therefore, quite right to say that the historic trend has at most only been temporarily slowed down by the revival of neoliberalism in the last 15 years.

Similarly, Mandel is right to question the supposed central significance of market prices for the individual consumer. In countless cases, "informal objective co-operation" would override price signals. Both the increasing socialisation of labour and informal co-operation are important starting points for any socialist economy that are already developing under capitalism. Socialism is not just an idea or a blueprint created in the heads of intellectuals, it is based on objective tendencies within capitalism that are further developed and generalised under the proletarian dictatorship.

Lastly, we agree with Mandel, that profits and wages are by no means the only conceivable incentive for economic efficiency and innovation. Indeed, in a socialist society the "social dividend", that is, appreciable progress for the whole of society, would become the mainspring for economic activity. In an entirely classless society, progress for the whole would at the same time mean progress for the individual. For the first time since primitive communism, there would not be a contradiction between the two.

Nevertheless, this would imply an enormously high level of consciousness, which transcended all individualistic and particularistic limitations. Nove made the point against Mandel that, for the individual, even with the best will in the world, it is impossible to see what the "general good" in any specific circumstance might be.

The individual always lacks information or motivation. This argument is only insufficiently answered by Mandel. For him, it is the organised self-management of the workers that would transform the objective socialisation of labour into a subjective one and thus create a consciousness that is directed toward the well-being of the whole of society.

In Mandel's conception of socialism, the blind mechanism of the law of value would be replaced by the organised self-management of the workers. Markets, money and prices would survive only in a tiny, subordinated sector. All other goods, especially those to satisfy basic and secondary needs, would be given away free of charge. The question, how much is to be produced of what, would be answered by research, and investment levels would be derived from that.

This is inadequate because it ignores the fact that socialist planning needs some quantitative standard by which to measure the productivity of technologies and types of labour organisation, to calculate proportions and to determine the possible levels of consumption. Socialist accumulation will still have to conform to some economic laws, for example, the law of optimum proportionality.

Mandel accepts that money and prices play a role in transitional society, but he seems to anticipate that under socialism they would be replaced simply by "use values". However, any rational planning has to relate concrete use values to the amount of labour that is necessary for their production. After all, human labour should be used as carefully as possible, and that includes the need to shorten labour time. To be able to guide development in that direction, money and prices cannot simply be dissolved into nothing.

Whilst it is true that the role of money for individual purchase will diminish because socialist society would expand the sphere of social provision, there will still be a need to calculate labour time as the quantitative and abstract (i.e. statistical) mirror of the concrete production process. This mirror will not only allow individual workers to see their own contribution within the overall context, but it is the precondition for workers' democratic congresses to decide rationally about proportions, priorities and perspectives.

In contrast to capitalism, there would not be any contradiction between abstract and concrete labour. Therefore, labour time calculation would not be the law of value in another form, it would not elevate either surplus production or labour time reduction to an abstract, overriding and automatic principle. On the contrary, living labour would become sovereign within the economic process and labour time calculation would be the instrument by which the workers would be able to develop their economy in accordance with the laws of socialist accumulation.

Every chosen priority of the overall plan has consequences in other areas and these consequences can only be assessed by calculating the labour time required to achieve the prioritised objectives. It will be through the calculation of labour time and the identification of priorities for the use of the available labour time, that socialist society will be able to achieve the goals of proportionality and egalitarianism.

Finally, labour time will also play a role in the distribution of non-essential goods. Short of communist abundance, the (lower) socialist epoch has the task of bringing the whole world up to a similar level of development and standard of living. This implies an enormous increase in productivity that will only be achieved over an appreciable length of time. As long as the supply of goods for "secondary needs" is below demand, and to the extent that socialist society wants to allow for "free consumer choice", there will be a need for "labour time coupons" to regulate access to those goods.

In summation, then, we have to conclude that Mandel, like many other important centrists before him, made a positive contribution to the debate over the political economy of socialist society. This is particularly true with regard to his emphasis on the objective tendencies within capitalism that simultaneously pave the way for its demise and establish the prerequisites of future society.

At the same time, Mandel simplified the problems of the socialist organisation of the economy and thus opened the socialist project to bourgeois critique. He failed to demarcate himself against utopian conceptions of socialism as a "use value economy", or as Varga put it in 1919, as a "system of natural economy".

In rightly striking against both the neo-classical onslaught on socialism and the market socialist capitulation to it, Mandel threw the baby out with the bathwater. While he was right to deny the eternal roles of value, price and money, he was wrong to ignore the necessity of quantitative standards for socialist planning. He did not explain how the contradiction between abstract and concrete labour under capitalism would be transformed into a correspondence between them under socialism. Thus, Mandel's answer to the market socialists remained incomplete.

The transition to socialism

For Adam Smith, labour was "a curse on Adam". Freedom and happiness were identical for the classical economist with being free from the need to work. The idea that labouring could be a liberating activity, and not what it generally is for most people under capitalism, an externally enforced necessity, could not be conceived by bourgeois political economy. Marx's view was different:

"Labour is the everlasting nature-imposed condition of human existence . . . common to all forms of society in which human beings live."

To work, to transform nature with a purposeful project in view, is the essence of humanity. As such, it is not to be avoided—impossible and utopian—but to be utterly transformed by the abolition of capitalism.

The socialist revolution will transfer all political power to the semi-state institutions of the proletariat (soviets, workers' militia etc) and, at the same time, initiate radical economic measures. It is not likely that a new workers' state will immediately expropriate all the means of production that were in private hands. The workers' state will start with the expropriation of the big banks, factories and trading organisations.

Simultaneously, the state will begin to construct an economic administration and planning agency that will spread its sphere of operation over time. The time taken to nationalise the great mass of the means of production will depend on the level of development of each country. During that process, class exploitation will be progressively removed and the private appropriation of surplus labour be abolished.

From the outset of the transition, the bulk of the surplus will belong to society; that is, to the democratic association of direct producers. Hence, workers will cease to be alienated from the product of their labour. The worker's labour will not simply become social through the act of private exchange in an anonymous market; it will be immediately and directly social since its content and form will be the subject of democratic discussion and debate.

Equally, the workers will not be alienated from the process of labouring. They will no longer be subject to oppression at work, subject to the tyranny of the clock and the manager. The machine will not dictate the pace of work to the machinist but vice-versa. In addition, workers will not be confined to one type of concrete work through their lifetime. Access to training and education will not bear the stamp of class origin, still less access to private sources of wealth; such training will produce diverse skills which are capable of being put to use during each person's lifetime and therefore one no longer is what one does.

Socialist-oriented society will ensure that each person's natural and acquired abilities are detected and nurtured to the fullest possible extent, free from the oppression that currently arises from class origin, gender, ethnicity or sexual orientation. As much dreary and repetitive labour as possible will be automated. The division between mental and manual forms of occupation will progressively be overcome. Indeed, the division between time-at-work and free time will increasingly be broken down. These considerations determine the Marxist approach to socialism. The overcoming of alienation, an end to the fetishism of commodity production, creating the possibility of real freedom with the end of humanity's prehistory.

While Marxists do not seek to establish the case for socialism out of its superior efficiency over capitalism, socialism is a system of economic organisation. And every schoolchild studying economics for the first time is appraised of "the economic problem" that all human societies have to confront; namely, how to satisfy a relatively limitless range of needs and desires with relatively scarce economic resources.

The production and consumption of these goods has to date been carried out within a variety of social (class) relationships. Each class mode of production (ancient, feudal and capitalist) has in general raised the overall productivity of human labour but within the framework of antagonistic and contradictory relations of production. Socialism will be the first progressive, non-antagonistic mode of production and will thereby be able to raise the productivity of human labour to new heights.

Over time, as the remnants of class society and conflicts decline, the main contradiction in the sphere of economic life will be between human endeavour and nature itself.

Nevertheless, in the early stages of transition "the economic problem" will remain; what to produce, how and in what proportions, given the continuing state of economic scarcity? How will production and consumption be reconciled to each other now that exploitation of the mass of human labour by a minority of private property owners has been overthrown? Democracy and empowerment are not sufficient conditions for the advance towards socialism in the economic sphere.

Economic goals and economic regulation

If freedom is the recognition of necessity then economic life will have to be regulated in the transition to socialism by the conscious application of a series of laws of development that govern production and consumption, laws that guarantee equilibrium and expansion. For this reason we reject the idea (from Bukharin) that there is no political economy of socialist transition but merely "social engineering". Rather, we agree with the broader definition of "political economy" given by Engels as:

"the science of the conditions and forms under which the various forms of human societies have produced and exchanged and on this basis have distributed their products."

Does this mean that in some form the law of value continues to regulate the transition to socialism or that it becomes "transparent" and "transformed" once the means of production are taken out of private hands, as Stalin once argued? Not at all!

For Marx and Engels, the law of value was an economic category which "expressed the most extensive servitude of the producers to their own products." Under socialism, relations between individuals whose labour is communal cannot express themselves in the form of the "value" of "things", hence cannot be governed by the "law of value". Once labour power ceases to be a commodity then no "thing" that is produced by labour can be subject to the law of value.

This is not to deny that, in the transition to socialism, the law of value remains as a residual, if declining, regulator. Wherever commodity production and exchange takes place there also will the law of value continue to exist. In industrially backward countries, with a high level of private agriculture, commodity production and exchange, the dictatorship of the proletariat will have to seek to accumulate for industrialisation in part through manipulating the law of value in its interest. This was the basis for the law of primitive socialist accumulation of Preobrazhensky in the USSR in the 1920s and it will remain the basis wherever the technological or political, basis for voluntary collectivisation of agriculture does not exist.

This situation is unlikely to trouble any country of the OECD in its internal relations of production. There is unlikely to be any significant commodity production outside the provision of certain personal services which do not involve hiring wage labour. However, by definition, the transition to socialism in its early stages will involve the more or less systematic exchange of goods and services between workers' states and capitalist countries.

Hence, the law of value (under whose sway the commodities will be produced in the capitalist countries) will effect the workers' states in several ways. First, it will effect the choice of whether to invest resources into producing the presently imported goods or continuing to import them.

Secondly, if the workers' state seeks to compete for markets with capitalist rivals in order to gain export earnings then such competition will compel the socialist-oriented industry to raise its productivity up to, or maintain it at, world market levels. This is all the more so, given the highly integrated international character of modern capitalism. The consequences of a total withdrawal from international trade for a developed industrial nation that has overthrown capitalist rule would be catastrophic.

Thirdly, it may be necessary for some period to allow foreign-owned concessions to exploit labour in return for a portion of the profits, rather than allow the under-utilisation of resources. The law of value will only cease to play any role under socialism, by which we mean a system of world production controlled by a single decentralised economic organisation. Until that time, individual workers' states can only seek to utilise and manipulate the law of value to the benefit of socialist accumulation.

The role of money in the transition to socialism

Under capitalism, money prices revolve around the values of commodities, that is, the amount of socially necessary labour time they contain. Although the value of any commodity is unknown to either capitalist or worker, because production is separated from society's wishes and needs, the market mechanism nevertheless measures the encapsulated value, albeit indirectly. Value is not a natural characteristic but a social relation. The fact that the producers of commodity cannot know how much socially necessary labour is contained in it flows from the lack of socialisation of production. The value can only be approximately assessed via the market (money) price.

Briefly in *Capital* Volume 1, and more thoroughly in Volume 3, Marx showed that the market price not only can, but must, deviate from value. Quite apart from market distortions and the oscillating price mechanism, this is is fundamentally because there is a society-wide process of equalisation of profit rates. Given widely varying organic capital compositions, as is the case in all complex industrial economies, different enterprises and different branches of industry spontaneously produce different profit rates.

Millions of exchange acts equalise them, approximately, thereby transforming commodity values into prices of production. The market mechanism then makes market prices oscillate around the prices of production, not around values. This is systematically the case under capitalism and is one important reason why capitalism needs a price unit that is formally completely independent from value.

The monetary system is thus not only historically bound up with capitalism but it is intimately linked with the dominance of dead over living labour, reflecting not only the invisibility of social values but also providing the necessary flexibility to cope with the systematic deviations of prices from values. The equalisation of profit rates makes sure that the capitals with high organic composition realise extra-profits, over and above the surplus value produced by their "own" workforces. It is another expression of the dictatorship of capital over labour, and money is the oil that lubricates the capitalist machine.

In the transitional economy of the workers' state, the abolition of private property in the main means of production immediately introduces important changes in the use of money and prices; but they are far from being "abolished". On the contrary, as an inherited instrument from capitalism they have to be used in the transition so long as commodity production and exchange exist either within the workers' state or between it and capitalist countries. Market and money in the first phases of the dictatorship of the proletariat are the only methods of measurement and thus remain the basis of calculation.

Planning will start with specific central projects in the first place and will be generalised later to increasing areas of the economy. At this stage, planning has to compare its results with market standards; ". . . a real testing out of an a priori calculation with the help of a universal equivalent, a thing that is unthinkable without a stable money system", as Trotsky put it. Despite the beginning of planning, therefore, the workers' state will still use money as a means of measurement. The law of value will dominate within the non-planned sectors and will play an important, if restricted and controlled role, throughout the economy.

Nonetheless, from the outset, there will be changes in the function of money. Market prices under capitalism indicate the ratios at which alternatives goods are exchanged in the market. This conveys a very narrow range of information. Prices conceived of as the cost of alternative uses of social labour will need to be constructed in the transition to socialism. Without them it would be impossible to measure productivity improvements or make rational judgements between alternative investment choices.

Private commodity producers are not interested in a range of external (i.e. social) costs, nor are they interested in the long run effects of their decisions. Genuine cost prices can take into consideration various social costs that lie outside the scope of the individual firm. While the prevailing costs of

production in the technologically developed capitalist world should provide a bench-mark for cost prices in the transition, post-capitalist society will need to construct cost prices for goods and services that reflect the cost of these externalities (e.g. domestic environmental destruction, cost of imported alternatives) in the short and long run.

Through the use of simultaneous equations, prices will be drawn up which take into account the effect of a number of variables (such as changing rates of investment in different sectors over time) which capitalist market prices are incapable of reflecting.

Such a system not only differs from the way money prices are constructed under capitalism but equally from the use of prices under the bureaucratically planned economies. Attempts there to construct artificial, even arbitrary, prices (e.g. the price of bread) to effect demand should be rejected. Not only does this not accurately signal the real costs to society but acts to encourage waste in the use of certain products. Although in the initial stages, the workers' state will consciously influence demand for some consumer goods and services through taxation or targeted benefits, it will still need to be able accurately to measure the real labour time costs of those goods and services. Clearly, even such subsidies will become superfluous to the extent that an egalitarian income structure prevails.

Naturally, as a means of exchange, the inherited use of money will diminish during the transition to socialism. (Although money will retain its function as a means of exchange for international trade with capitalist countries in the transition to socialism, necessitating an acceptable international money). In the first instance, many commodities will be recognised by society as necessities and be distributed as a right and paid for out of social taxation (i.e. a minimum level of housing, clothing and food goods). There will be no need for these to be bought and sold, a transaction requiring money.

Under capitalism, most people only consume a few thousand different types of commodities in the course of a lifetime. Over time, more and more of these goods will be distributed automatically as a recognised social entitlement. As productivity of labour improves, the price of such goods (accurately reflecting a diminishing portion of social labour) will dwindle towards zero; they will become "too cheap to meter" and be added to the list of non-monetary exchanges. Towards communism, the role of money (as an independent physical expression of different amounts of social labour) will disappear and be replaced by mere accounting devices such as units/hours of social labour.

In the later phases of the transition to socialism, which will probably be achieved earlier in highly industrialised countries than in backward ones, new "socialistic" methods of calculation will emerge. We have to be clear that within the planned ("socialist") sector, the category of value will lose its significance to the extent that the plan effectively relates social needs to the distribution of labour. "Value" (i.e. abstract labour) as something different from the amount of concrete labour invested will wither away as labour becomes directly social.

Therefore, the task will not be to construct money prices that reflect value, that is, the amount of socially necessary labour time, more precisely than the market mechanism does. To the extent that the market is restricted and overcome by the extension of planning, it cannot effectively play the role of a corrective any more. Therefore, value-oriented money prices would appear as increasingly arbitrary. For these reasons another mode of economic measurement will have to be established.

Within the planned sector of the workers' state economy, there will be no need for a mechanism that equalises profit rates and thereby produces prices of production. There will not be an automatic mechanism that places a premium on more productive enterprises in the form of extra-profits. Decisions as to where investment should flow, which production should be expanded and which reduced, will be by the workers' councils on the basis of social, ecological and labour-quantity information.

Of course, there will remain a difference between the amount of concrete labour necessary to produce a specific product in a specific production site and the amount of necessary labour for the same product on the social level, that is, on average. The latter is necessary for national and global calculation and planning, whereas the former is the basis for individual consumption. It is thus sensible to differentiate between the individual and the social "labour value" of all production. "Labour value" in this context is something very different from value within commodity production. It is identical with concrete labour time and therefore known *ex ante*.

Increasingly, labour certificates will replace money where exchange of the wages fund against consumption goods still continues. It will not be necessary to issue certificates either where it is just a matter of accounting for the range of goods and services that are distributed directly to all citizens as a right or in keeping track of the flow of materials and labour in Department I and II industries through to the point of final consumption. Here, mere accounting software will suffice.

Labour certificates will be used by workers in return for labour expended and will represent the amount of hours worked. The certificate can be exchanged for an amount of goods and services that embody the same amount of labour-time as the coupon. In this case, the certificate is a purely passive representation of the same amount of socially necessary labour in different forms.

The certificate could, however, also act as money where the planned "value" of a product turned out to be wrong. For example, if the planned "value" of a product were two hours of socially necessary labour time but workers were willing to exchange three certificates for it, because of shortage of supply, this would demonstrate an error in the allocation of time within the plan. Thus, the remaining market mechanism would serve to "verify the plan" in Trotsky's phrase. In this case the act of exchange is not passive but determines, *post festum*, the amount of socially necessary labour-time in the product. Naturally, such an experience would be a sign that the plan needed to be corrected. It would be a matter of adjusting supply for those goods that were in excess demand.

Regulation by labour-time

The building of a planned economy necessarily implies the conscious allocation of resources to achieve identified objectives. Although calculation of labour time provides the means to measure the allocation it does not itself regulate the functioning of the economic system in the way that law of value does within capitalism. Instead, economic regulation flows from decision-making in the political systems of the workers' state.

Social production must seek to raise labour productivity over time through optimum (not necessarily maximum) use of all the factors of production. An optimum level of output is a level that is compatible with other goals such as shortening the working day and increasing the amount of time available for education and leisure as well as allowing for rational use of non-renewable raw materials and planned reproduction of renewable resources.

Without a progressive increase in disposable time it will prove impossible for workers to develop themselves as rounded individuals. Education and the pursuit of a range of activities will be essential pre-conditions for an active participation in the massively increased process of decision-making that will be a feature of the transition. Taking collective control of one's life, at work, in the local community and over the multifarious economic and political decisions will require time and study.

It flows from this that society may wish to concentrate productivity improvements in the industries responsible for consumer goods in order to reduce the amount of necessary labour-time required to reproduce labour. The aim in reducing necessary labour time is not, as it is under capitalism, to maximise the length of surplus labour time. It is to increase disposable labour-time. In other words, surplus labour-time is not the independent variable to be maximised at all costs but a dependent variable.

Once the length of the working day has been established and the amount of disposable time set by the plan, then there remains naturally the extent and structure of material production. The goal of production is not now production for its own sake, nor for profit maximisation. Rather, production must serve final consumption, the needs of the democratic association of producers.

Under capitalism, the only "needs" recognised as legitimate are those that appear through a market exchange and the ability to pay. The only needs recognised as "rational", therefore, are those which actually exist in the market place. This is so even if food is exported from famine stricken areas or holiday homes for the rich exist alongside thousands of homeless people. By contrast, a rational "need" from a socialist standpoint is one related to guaranteeing provision of food, shelter, clothing and access to recreation and education for all.

In order to achieve this, it will be necessary to massively increase the level of the productive forces. In this sense, production is governed by the law of socialist accumulation. It will be necessary to raise the rate of accumulation (especially of modern industrial investment) at the same time as raising the volume of consumption. This can be done through various means.

First, a reorganisation of the international and national division of labour will produce increased economies of scale and new efficiencies; this would include the gains to be made from an elimination of costly trade barriers and the rational dissemination of technological innovations throughout industry, now no longer prevented by private property.

Secondly, a drastic reduction in unproductive expenditures (e.g. weapons, specifically capitalist bureaucracy, marketing costs of most consumer goods, wasteful and socially harmful "luxury" spending) will allow for a redirection of social labour to productive uses. Thirdly, the expropriation of private property in the means of production will allow for the full employment of labour and other resources and thereby massively increase goods and services.

Fourthly, it can be expected that a significant increase in the productivity of labour would come from the removal of the oppressive and forced character of waged labour. New scope for the initiative and inventiveness of collective labour will be possible. Fifthly, a revolutionary programme of land reform in many countries would lead to increases in production.

Production must expand in such a way as to ensure that different types of goods and services are produced in the necessary proportions (including between producer goods and consumer goods) to ensure equilibrium between different sectors of production and between production and consumption (e.g. avoiding bottlenecks, shortages, unplanned oversupply). This must include decisions about the pattern of final demand by consumers as well as the rate and structure of investment.

The pattern of final demand will determine the mix of producer and consumer goods and the investment decisions will include what level of current consumption is willingly deferred in order to guarantee future consumption. Planned over-production will necessarily be part of these calculations in order to cater for sudden demands not anticipated at the stage of initial plan formulation.

In making this range of decisions there will be objective economic criteria which should be taken into account. A transitional economy would aim to increase its investment programme in the means of production up to the point where no further gain in productivity would result from using labour to embody itself as stored up labour and where the total net output should be used for current consumption.

The rate at which this investment should take place depends more concretely on the conditions existing at the time the transition is undertaken. Certainly, the present cannot be sacrificed for the future. This would happen if current consumption were squeezed and all resources used for investment in order to achieve maximum productivity at the earliest opportunity.

It may be necessary to devote output in the short-term to raising the standard of living even at the expense of a less rapid rate of increase in the more distant future. On the other hand, a compromise may have to be made between this desire and investment demands where a country suffers from a low level of industrialisation, since a minimum level of industrialisation would be essential for establishing a centralised plan for the whole economy.

A federation of several workers' states, and even more so a world federation of soviet socialist republics, would aim at the rapid equalisation of levels of industrialisation between them. This implies to a certain extent a shift of resources to the "Third World" countries from the more industrially developed parts of the world to compensate for the situation that prevailed under imperialism.

But this does not mean that the standard of living of the more developed countries will deteriorate during this phase. It would only grow more slowly than it would without undertaking this act of international co-operation. Secondly, the tempo of industrial development in backward countries must not be so high that the culture of the local population cannot evolve without duress and oppression. A reasonable trade-off between both imperatives has to be found by means of workers' democracy

Economic efficiency

A rational reorganisation of production and consumption will only bring about the first gains. As the transition progresses towards its goal of socialism, productivity will have to be systematically enhanced. It will be necessary to learn to economise on the use of labour, to become more efficient. At this point Marxists confront the first challenge laid down by the earliest critics of socialism.

Marxists have established that the aim of reducing the length of the working day and increasing disposable labour time is sufficient motive for efficiency strivings. But various critiques this century have gone further and insisted that by abolishing market regulation socialism has no effective method of measuring economic progress. The Austrian school (von Mises, Hayek) argued that socialism, lacking a system of market derived prices, had no mechanism for calculating

rationally how to distribute productive resources between various uses. Of any two methods of production it would be impossible to say which was the "more economic" because any comparison of costs against their value-productivity would be impossible.

It is true that, in order to make a comparison between the efficiency of alternative uses of resources, qualitatively different goods must be reducible to quantitative terms. It is wrong, however, to believe that only market prices can produce this calculation. What is true is that in an atomised and individually competitive economy the movement of prices of intermediate and final goods is the only way that the problem of resource allocation can be solved. Enterprises are forced to respond to these externally imposed conditions.

But that is only one means of solving the problem of resource allocation. In the transition to socialism, the the reduction of qualitatively different goods to a common quantitative standard will be done via the calculation of the labour-time embodied in the differing products and services.

All opponents of Marxism (including market socialists) insist that this is not possible. Von Mises, Tugan Baronovsky and Bohm-Bawerk rejected the labour theory of value as a whole and, therefore, also as a means of calculation according to embodied labour-time. Even Karl Kautsky believed that in practice it was impossible to calculate the amount of socially necessary labour time in a given commodity.

In contrast, Marx argued that under socialism;

"labour-time would . . . play a double part. Its apportionment in accordance with a definite plan maintains the correct proportions between the different functions of labour and the various needs of the associations. On the other hand, labour-time also serves as a measure of the parts taken by each individual in the common labour and his share in the part of the total product destined for individual consumption."

Allocation of production according to labour-time

Labour-time provides the common basis for the calculations of costs involved in the allocation of social labour to different spheres of production as well as determining the distribution of means of consumption to the population. Let us first consider the allocation of resources to social production.

It is necessary first to establish to what labour time we are referring. Under capitalism there is a distinction between concrete and abstract labour. The act of exchange itself under capitalism reduces all concrete labours to so much abstract human labour—value. This value in turn can only appear in the form of a rate of exchange (exchange-value) between a definite quantity of one commodity and a definite quantity of another. Money is an independent representation of this exchange value.

Under capitalism, as a result of the constant experience of market exchanges and competition a clear idea of what constitutes labour of average intensity for any given industry emerges, that is, socially necessary labour. In the transition to socialism the abolition of the commodity production eliminates the "blind", after the event calculation of socially necessary labour. This calculation is now made consciously by society.

What counts as an averagely intense unit of labour time will have to decided upon by workers' democracy and supervised and checked by workers' committees. The discussion of such standards will obviously consider capitalist comparisons as well but will refrain from slavishly copying them.

Scientifically established standards of labour intensity would have to include both a physical and a psychological component in its evaluation of stress and exertion. If a specific type of work leads to a particularly high level of exertion and exhaustion this should not be seen as producing more value; rather, the concrete labour should be made to correspond to labour of average intensity by compensating rest periods, which become incorporated into the calculated work time.

The calculation of labour-time that specific products represent will be the task of the workforce itself. For this to be achieved the workers simply have to add up the hours that their brigade or team is expending and add this figure to the sum that they received together with their raw materials and initial products. They add an all-inclusive figure for wear and tear, energy and water etc. and compare the resulting total with the equivalent figures of all enterprises that produce the same product.

The average amount of labour time necessary represents the social labour-value which may differ from the individual labour-values in both directions. This information is an important basis for the planning authorities. Labour coupon entitlement will be derived from the individual amount of hours expended, but economic calculations will have to be based on social labour-value figures. Such calculations (and thus the decisions based on them) will be highly transparent for all workers as they will be expressed in units of labour time.

This system will provide the basis for cost calculations and the allocation of resources to alternative uses. The "price" of goods and services will be measured in units of labour time. Producer goods and consumer goods will be priced according to their cost of production (i.e. raw materials, transferred dead labour from machinery, and the agreed price of labour (again, as measured in units of labour time needed to make the goods that reproduce labour to an acceptable minimum standard). The amount of surplus labour time (or mark up) added to cost price will be set by society according to the agreed rate of investment.

Once a scale of priorities is drawn up by the direct producers themselves as a result of collective debate the actual productivities of the resources in various uses needs to be calculated. It is not necessary first to discover the "costs" of resources and then find out their relative productiveness. Planning bodies would need to know how many hours of labour time would be necessary (stored up in machinery and labour itself) to produce an extra n yards of linen, compared to how many extra cars could be produced by the allocation of the same amount of hours.

It would be possible to arrive at an idea of which, out of a range of alternatives, would result in the greatest net productivity. In addition, comparisons with the immediate past would be used. Such detailed comparisons could be made from the national macro-economic level right down to the enterprise level (and even departmental level) depending on the technical level of the information system. The "monetary" or "price" expression of these relative productivities is entirely secondary and the only consideration is that it be stable and consistently applied to all parts of the economy.

Distribution according to labour-time

The principles governing the distribution of the social product among the workers will be a matter for the society of direct producers themselves to work out. Marx and Engels suggested that this principle would be that:

"the individual producer receives back from society—after deductions have been made—exactly what he gives to it. What he has given to it is his individual quantum of labour . . . He receives a certificate from society that he has furnished so much labour . . . and with this certificate he draws from the

social stock of means of consumption as much as costs the same amount of labour." (Marx, *Critique of the Gotha Programme*, Selected Works Vol 3, p17/18)

Marx adopted this principle because he recognised that it would be impossible to leap to a society without generalised scarcity and hence there would be a need to regulate access to limited resources. But he was already aware that the slogan of "each according to his abilities" was adopted "only for the sake of parallel with the production of commodities" and that the concrete method and norms of distribution of consumption goods will depend on the degree of development of the social forces of production.

The more developed the economy at the start of the socialist transition, the more will the needs of the general population be the starting point. It is likely that in the industrially developed imperialist democracies the socialist transition will start from a fairly high level of guaranteed access to consumption goods, irrespective of individual abilities.

Although this would immediately be applicable to goods which can be simply given away by the state because productivity in that sphere is already so high that free distribution will not raise demand above possible production, it should not be expected that this will be possible for a majority of goods within any foreseeable time. If we think of socialism in world wide terms, demand (i.e. need, not ability to pay) for goods will be so enormous that for decades it will be beyond the possibilities of production, even if we assume an accelerated growth of productivity under most phases of the workers' state.

Hence, the fact that labour coupons will be distributed according to how much work an individual has carried out implies that there will be certain degree of social inequality in the transition. This inequality will reflect, among other things, the need to provide social incentives to undertake unsocial tasks or normal tasks during unsocial hours or work in remote and inhospitable conditions.

In other cases, workers will prefer to trade-off increased disposable time against labour certificates. Definite limits must be established to this inequality and where possible other measures must be found for accomplishing the same ends by different means. For example, regular rotation of jobs, based on multi-skilling over a lifetime may make it feasible to consider that all workers should be required to undertake certain tasks in turn as a social duty, hence eliminating the need for a permanent minority of workers to have to be induced to carry them out.

Marxists reject out of hand the idea that workers should receive wage bonuses according to the improvements in productivity registered by their enterprise. In the first place, differing productivity levels of separate enterprises should not in general be the basis for differential reward since it will generally be a product of macro-economic investment decisions taken by society as a whole. The benefits of increased productivity should not fall to individual workers or plants but to society as a whole in the form of lowered prices as well as increased quality and diversity of goods. Every worker will thus have the same interest, a collective interest, in ensuring the maximum efficiency of production to achieve the most rapid fall in prices. Workers as consumers will benefit directly from the achievements of workers as producers.

The problem of skilled labour

All forms of concrete human labour, whether skilled or unskilled, are qualitatively different from each other and not measurable by a common standard as concrete labour. That is why under capitalism all concrete labour, including skilled labour, is reduced to abstract human labour, in the process of exchange, behind the backs of people as an act of convention.

Marx considered skilled or "complex" labour to be only a multiple of unskilled labour. Does this mean it should receive higher wages under socialism or that it creates more value than unskilled labour?

Under capitalism, where the costs of training and reproducing skilled labour are borne privately, skilled labour receives higher wages. This is increasingly less so during the transition to socialism. As Engels said; "in a socialisitically organised society these costs are borne by society and to it, therefore, belong the fruits, the greater 'values' produced by compound labour".

So the remuneration to skilled labour must be the same as for all labour; egalitarianism must be the guiding principle. There are no grounds for challenging this with the view that skilled labour involves any greater physical or mental exertion than unskilled.

Nor does skilled labour create more value during the course of an hour. This would be to confuse the exchange value of labour power with its use-value. Its "exchange-value" may be higher due to the higher costs of reproducing it but it does not have any mysterious higher power of creating more value. But the higher reproduction-value must be recognised in the planning and accounting process during the transition.

Take a project which requires 100 workers for ten days of whom ten workers must possess special training and this training embodies 200 working days in total. In this case, society has to account for these 200 days and thus the project would embody 1200 days not 1,000. Hence, skilled labour in this sense, while it does not create more value than unskilled labour, does, like constant capital under capitalism, embody a certain proportion of stored labour that is transferred to the value of the final product.

Choice

It has been suggested that removing the market allocation of commodities will lead to a reduction in choice of the range of goods and services and in the level of consumer satisfaction. Even the market socialists argue that the market and price system is the best system for co-ordinating the huge quantity of information about consumer needs and desires. By contrast, they argue, passing this information up and across any planning system without distortion is impossible and so the plan could not ensure that production conforms to the (ever changing) pattern of demand.

In reality, consumer satisfaction under capitalism is restricted both on the supply side by the demands of profit maximisation and competition, and on the demand side by the structure of income. In the first place, under modern capitalism, the consumer is forced to pay far more than the average cost of production for goods and services due to the huge distribution (including advertising) costs involved in marketing any product. These can typically amount to more than 50% of market price. Under a transitional economy, these costs would be eliminated and for a fraction of the cost a multiplicity of sales outlets and information bureaux could be set up for the consumer's benefit.

In the second place, consumption patterns are not set by the consumers but by the producers under capitalism. The growing monopolisation of production gives companies the power to substitute products with higher profit margins (e.g CDs over LPs) and which leads to the narrowing of choice for the consumer. The clothes industry determines seasonal fashions according to the need of companies to increase their turnover.

On the other hand, consumer choice is irrelevant without income to make demand effective. The housing market, a key sector of all modern industrial and service economies, is fuelled by a core of second-home buyers while homelessness escalates alongside this demand. The idea, therefore, that market price is an adequate, let alone the best, signal of consumer wants is grotesque. All it reveals is the structure of income established by exploitation and the inequality of private property ownership.

In the transition to socialism consumer satisfaction will be immeasurably broadened (to the great mass of impoverished) and massively deepened (a new range of goods and services that respect minority tastes previously too unprofitable to cater for).

Solving the information problem

The problem of how changes in consumer demand would be dealt with in any socialist system of distribution invites the charge from bourgeois economists (especially Hayek) that no socialist planning agency could ever aquire the necessary complete picture of all the fragmented knowledge of consumer needs that exists in order to arrive at creative solutions to changing desires.

In response, we first have to say that in the first stages of the transition where "constructed prices" are necessary, these prices can easily be used to reflect certain fluctuations in consumer demand. Here, changes in inventories are managed by: (a) price movements which can match short-term disequilibrium in supply and demand and (b) changes in the respective production schedules. The law of value would have no role in either case since the higher prices would not be allowed to transform themselves into extra-profits and, thereby, regulate the production process.

Secondly, later in the transition, when socialism approaches and when electronic labour coupons are used to regulate access to those residual goods that are not yet available in "abundance", then the computerised information on stock control will suffice in almost all cases to correct impending shortages well in advance of any shortfall in the provision of goods at the point of sale. So "price fluctuations" to regulate supply and demand will no longer be necessary.

As to the general "informational problem" as stated by Hayek and others, we reply that any healthy workers' state would not build up a planning system in a hypercentralised manner. The supercentralisim and atrophy of the planning system in the degenerated workers' states reflected the needs of the parastical bureaucracy and did not flow from any "principle" of planning. On the contrary, proletarian planning has to be simulataneously centralised and decentralised. How can this be arranged?

Proletarian plannning implies a hierarchical level of decision-making. Each decision should be taken at the level that is best able to carry out the decision and which is effected by the decision; in other words, every decision is to be taken at as high a level as necessary and at as low a level as possible. Hence, if it is possible to decide on incremental changes in the product mix of a specific factory at a local (i.e. plant) level without disrupting the overall pattern, then this should be done and the available local knowledge can inform that decision.

On the other hand, if any developments of a technological or ecological character demand certain adaptive changes within the production schedules of a range of factories, then the most effective level of decision-making must reside at a higher level, be that regional, national or international. In principle, there is no problem with locating decision-making at an adequate level as long as there is no bureaucracy that seeks to monopolise (central) power in its hands and as long as there is no nascent bourgeoisie that wants to decentralise economic decision-making into private hands.

Innovation and competition

Many writers sympathetic to centralised planning of some sort (e.g. Itoh, Elson) as well as all market socialists, have argued that even a de-centralised planned economy has a problem generating innovation if there is no competition between enterprises. They have argued that, in order to stimulate improvements in technique, as well as new goods, enterprises must be allowed to command a "monopoly profit" as a result of devising a new product line or a new process.

This view must be rejected on the grounds that far from reconciling individual and social needs it brings them into conflict. It would mean, *de facto* if not *de jure*, to recognise private property (in a patent for a new product or technique for example). This would then obstruct the rapid diffusion of new inventions across society and condemn part of industry to inefficiency and relative backwardness.

As with the question of "wages", innovation needs to be rewarded in such a way that the whole population benefits including that part which brings forth the innovation. Moreover, research and development will more and more cease to be the preserve of one specialised part of the workforce and become part of the ongoing labour of all workers.

Nevertheless, there is a creative role to be played by "socialist competition". Not all forms of competition are destructive and erode solidarity between producers. A comradely culture of seeking to improve and better the results of other workers can be one way of positively harnessing human aggression.

Planning in the transition: take capitalism's best practice and better it!

As Trotsky said in 1923, economic regulation must be guided by the aim "to spread the planning principle to the entire market, thus swallowing and eliminating it". In essence, the best argument for planning in the transition to socialism is the experience of capitalism in the twentieth century. It is important that we take this experience as our point of departure.

The tendencies within the capitalist mode of production itself prove both the possibility of planning on an ever more inclusive scale and show the need to destroy private property in the means of production in order to fulfil the intrinsic possibilities of planning.

Within global capitalist production, the last twenty years has seen what has come to be known as the "quality revolution" which has accompanied and made possible "lean production". The success of the Japanese during the 1970s with these techniques, and the increasing competitiveness of the world market in the 1980s, forced these new techniques on every producer.

The "quality revolution" is based on giving workers more control of the production process. Hitherto, the dominant form of production since the 1920s has been the assembly line. This technique of production reduced workers to simple assembling machines whose activity was governed by the line which brought the work to them.

While this technique boosted productivity enormously, it did so on the basis of low quality of production. Quality departments had to be set up at the end of the line to correct defects created by this mind-numbing and body-destroying method of production. With mass line assembly work, workers were reduced to automatons with no say in the production process let alone the pace of the line.

The "quality revolution" has sought to get rid of some of the alienation of the assembly line. Workers are now organised in work teams doing a broader range of tasks. Above all, they are now responsible for quality and that has meant greater consultation and the power to control the immediate work process.

However, giving workers increased control of the work process requires increased loyalty to "one's company" lest it become a threat to capitalism itself. It requires class harmony within production. In the face of class struggle prompted by economic crisis it breaks down. Quality production under capitalism comes into contradiction with the competitive and anarchic character of capitalism.

Quality revolution serves to overcome the divide between mental and physical labour. In the past, products were designed with scant regard to the production process. These designs were then modified by the production engineers to put them into operation.

With "quality production", workers are consulted at the design stage. Products are designed to be defect-free from conception, and this is only made possible by the collaboration of all those engaged in the design, development and production phases as a joint team. This has broken down the management fiefdoms. Before, each phase had to pass through a number of different departments, each of whom had to have their little say to justify their existence. The result is that not only has the development cycle of major products been halved, but they are better designed and more worker friendly to produce.

In its most advanced form, this integration takes the form of concurrent engineering which indicates that capitalism is forced to minimise the disruption caused by the social division of labour. With concurrent engineering, design and production are tackled simultaneously. As the design progresses, so too does the method of producing it, with the one feeding back into the other. This requires the integration of design engineering, material sciences and manufacturing technology. It requires an even tighter co-operation between the design centre, suppliers and supportive services.

Just as "quality production" involves increased socialisation of the labour process within a factory or company, so it and "lean production" tend to socialise production between factories, their suppliers and all the contractors who support it.

Manufacturers not only demand defect-free supplies, but the minimum of supplies - Just In Time inventories. The best factories in Japan operate with only two hours' worth of parts. To achieve this level of efficiency, suppliers have to tap into the computer of the producer to determine the flow of production and the requirement, therefore, for their parts.

The next goal for the capitalist labour process is computer integrated manufacturing (CIM). This has not been achieved to date—an automated shop floor, with functions such as purchasing, stock and sales in the retail outlets linked electronically to the shop floor. The real problem is its complexity and the complexity flows from the anarchy of the market. If sales could be predicted and planned in advance, then CIM would be practicable. Its full execution requires the end of the business cycle—an impossibility under capitalism.

Despite the fact that companies spend millions in marketing efforts to discover consumer wants , the real problem is not what consumers want, but what they can afford to buy, and it is this element that is the most unpredictable of all and lies behind the operation of the business cycle. The more these changes in the labour process develop, the more their efficient and further development requires the overcoming of the contradiction between private consumption and socialised production.

Planning structures and the semi-state

Objections to planning arise from different starting points; some have argued that without competition innovation and efficiency are impossible. Others insist that without markets it is impossible to collate the necessary information about consumer preferences since the centralisation inherent in state ownership and direction deters the flow of information and creates a distinct layer of functionaries with separate interests that disrupt the operation of any plan.

This is based on a misunderstanding of the nature of the state in the transition. This state is a semi-state. The semi-state retains core features of all states: a centralised armed power to defend the revolution from internal enemies and from outside threats. So long as scarcity and inequalities exist some form of body regulating the sphere of distribution will be necessary.

But this state is no longer "out of control", raised above and against the people. It is now a state that has reconnected to civil society and does not stand opposed to it. For example, the state functionaries themselves are not a permanent caste of officials, but are made up of individuals who are trained for this task among others and are subject to rotation. Moreover, they are accountable and recallable by the general population that acts as a check upon the development of any special interests that collide with the mass of consumers and producers.

In short, the process of political and economic negotiation between society and state, between politics and economics is fluid. Even the market socialists cannot devise a state that is as "democratic" as this. All market socialists advocate parliamentary democracy and a sphere of "politics", which is separate from economic management. It is they who thereby advocate the need for bureaucracy to mediate between state and civil society.

The structures of the planning apparatus work on the principle of elective representative democracy. Members of workers' management committees from places of work together with representatives of consumer associations meet at every level from local, regional to national. They are advised by a layer of specialists. The national planning commissions are responsible for devising broad parameters of aggregate investment and consumption, including the allocation of production into one of several sectors (transport, production, services for example).

These will be passed down for discussion and disaggregation at both a sectoral level and regional/local level. Management committees of factories, farms and offices will discuss the implications of broad planning targets for them.

At regional and local level, organisations will devise targets for specific industries; this would include suggestions on product mix for final consumption. This will then be fed back up the system and the implications drawn out for the targets of semi-finished products and raw materials.

The plan should be as decentralised as possible; that is, binding decisions should be taken as low down the planning scale as possible. For example, the same amount of prepared timber could have multifarious uses for the consumer; factories receiving it have machinery capable of making numerous end products out of the resources; that is the use-value form of the given quantity of social labour should be decided by the end consumer as far as possible.

Clearly, however, final choices have implications for resources back up the line of planning. Transport, storage and packaging requirements may differ according to the final choice of end use and this will have to be negotiated with the relevant suppliers before final decisions are taken.

The rationale for decentralisation is that the centre is not omniscient and that the necessary information required to make decisions about resource allocation cannot in principle be known by the centre given the nature of the information or the speed with which it must be acted upon.

Even the best of plans carried out with as much free flow of information as possible, free from bureaucratic self-interest and with the best computers in the world, remain rough approximations, provisional hypotheses.

They need constant adjustment and checking. At the end of the day, the transitional economy is demand driven, that is, accumulation is guided by the democratic wishes of the mass of workers themselves as consumers of their own products. The consumer must be judge of the results of the plan.

There are many ways that the plan can be "verified and corrected", in Trotsky's words. Some products will be capable of being adjusted in whole or in part with little technical difficulty in the short run by quality control feedback even on a day to day basis; CIM technology and inventory controls can be used to bring production into line with current demand, even if not in full accord with the original plan projections.

But the market (i.e. exchange of consumer goods with wages) too, will have its place. This is for two reasons. First, the consumer makes a range of choices only on a day to day basis (e.g. most foods). This choice from a range of possible alternatives must continue. But it will only be possible to plan in broad terms (based on market research and watchful of past trends) in anticipation of some consumer needs. In essence, the worker has the right to change some demand preferences daily.

In addition, given the time lag between plan formulation and production in the case of some consumer durables, it is likely that consumer preferences may change in the interim.

Moreover, inventory controls and just-in-time techniques for certain products could not alter production in line with demand in anything but the long or medium run.

In these cases, the consumers will have to decide whether to buy the products at the price (equal to cost of production); if not then price would have to be adjusted for those in greater demand.

Given that the plan has predetermined aggregate demand and production schedules there could only be a shift in the structure of demand. Prices would have to be raised or lowered above or below cost price to clear the market.

The results of this process can then be taken into consideration in drawing up planning schedules for the next round of planning. These market prices must be market clearing prices.

They must not—as for the market socialists—lead to automatic increases in production based on the increased profitability to the enterprise in raising output; if allowed, this would have considerable disruptive effects on planning schedules up the chain of resource allocation. Rather, use-value and social labour considerations will have to be taken together in the next round of planning.

Postscript: The triumph of socialism and the transition to communism

The triumph of socialism—the lower stage of communism—is impossible to achieve in one country and will be attained as a global system or not at all. It assumes that the satisfaction of an agreed basic level of economic and cultural needs by the world's population has been reached by the methods outlined earlier.

Under communism, political economy gives way to the administration of things, or social engineering. There is no need for a separate sphere of politics—democracy itself comes to an end. Use-values are in such abundance with such minimum application of labour that humans are free to develop their personality in other forms of creative endeavour.

It has become common on the left to ridicule the Marxist concept of abundance as the prevailing condition with regard to material goods under communism.

The old argument that human desires and wishes are in principle unlimited and, therefore, can never be fully satisfied is cited as an argument against the notion of communist abundance.

This argument wrongly assumes that socialist society will simply perpetuate capitalist patterns of consumption. Firstly, communist society will raise labour productivity to such a high level as to satisfy the basic needs of the entire world population and to provide sufficient reserves to satisfy a reasonable proportion of non-essential desires for everybody. This will allow human relations to be deepened, new forms of cultural expression to emerge, and the development of the human personality in general to be given more weight in society.

Secondly, the long term changes in social structure will generate a quite different psychology among people under communism. The end of commodity fetishism, widespread rivalry and the current need for material compensation for alienation will relativise the importance presently attached to material products.

Thirdly, the conscious regulation of society that is possible under communism allows a long term balance to be struck between humankind and the rest of nature.

It will be obvious to all that for ecological reasons we will have to set some limit to the expansion of industry, at least as it is understood today.These three elements, taken together, create a situation where material welfare, even if it is not absolutely abundant, reaches a level where economic accumulation ceases to be the motor force of society. Instead, human development will gain an essentially social, cultural and psychological direction.●