

**Economics Discussion Papers 2000-4**

**MARX AND THE SOVIET ECONOMIC SYSTEM**

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**Abstract**

This paper argues that the economic system that evolved in the former Soviet Union (SU) in the late 1920s and early 1930s was based on a mechanistic interpretation of Marx's theory of historical development.

**Keywords:** soviet economic system; Marx; historical development

**JEL codes:** B14; P20

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## **INTRODUCTION**

In this paper I will argue that the economic system that evolved by late 1920s in the former Soviet Union was based on a narrow interpretation of Marx's theory of historical development, as well as the state of the world economy in 1920s and early 1930s. Thus, between the two extremes of the interpretations of Soviet experience, i.e. the 'death of Marx', the end of history (Fukuyama 1992) on the one hand and the complete exoneration of Marx (Callinicos 1991) on the other hand, I will follow a middle course closer to the latter but not identical to it. I will particularly isolate those elements of Marx's thought that led to interpretations that was at the core of the Soviet economic system.

In what follows I will first look at the essence of Marx's vision of communism. I will then consider the views of Engels and the economists of the Second International. This will be followed by a brief review of the Soviet economic development and the industrialization debate in the 1920s. Finally I will evaluate the Soviet economic thought and policy in this period that led to the creation of the Soviet economic system in late 1920s.

## **MARX'S VISION OF COMMUNISM**

According to Marx capitalism expands free time by expanding the pool of surplus labour (surplus value). This surplus value is appropriated by capitalists. Although in its absolute form surplus value expands, its further expansion runs into limits that are physiological (strength and health of

the working population), political (the rise of trade union movement, etc.) and physical (the working day cannot be pushed beyond a maximum number of hours in a day) (see Shamsavari 1991, Chap. Six). This is why the industrial revolution was such a significant stage in the development of capitalism. With the use of machinery surplus value can expand (without the prolongation of or even with reduction in the working day) in two ways: a) a reduction in the necessary labour time by cheapening the cost of wage goods and b) intensification of the labour process by use of advanced machinery (eg. assembly line) or by managerial techniques (e.g. Taylorism, unknown to Marx). Thus the key for Marx was technology. Technology held the key to the gates of a workers' paradise in which the free time appropriated by capitalists would be at workers disposal-free time for their development as human beings. For Marx this represents the essence of communism and the beginning of history, i.e. the true history of human development, rather than economic development. The following lines from **Grundrisse** clearly shows the primacy of human development for Marx, which puts him still way beyond current concerns with this issue:

Thus the old view, in which the human being appears as the aim of production, regardless of his limited national, religious, political character, seems to be very lofty when contrasted to the modern world, where production appears as the aim of mankind and wealth as the aim of production. In fact, however, when the limited bourgeois form is stripped away, what is wealth other than the universality of the individual needs, capacities, pleasures, productive forces etc. created through universal exchange? The full development of human mastery over the forces of nature, those of so-called nature as well as of humanity's own nature? The absolute working-out of his creative potentialities, with no pre-supposition other than the previous historic development, which makes this totality of development, i.e. the development of all human powers as such the end in

itself, not as measured on a predetermined yardstick? (Marx 1973, p.488)

This vision is highly commendable and should be at the core of every socialist movement worthy of the name. However the process of achieving this lofty goal has proven to be much more complicated than Marx's view of it as a workers-led revolution that overthrows the capitalist rule and its mode of production. I will return to this question at the conclusion of this study. The point to emphasise again is that for Marx technological change, the growth of productive forces under capitalism, is the absolute foundation for communist mode of production. This view formed the core of the thought of socialist economists of the Second International as well as the architects of the Soviet economic system.

Viewed in this light it would seem that I have interpreted Marx's theory of historical development in the narrowest possible way, not just as an economic determinism but worse as a technological determinism. I have strongly criticized these interpretations elsewhere, in particular in connection with Cohen's interpretation (see Shamsavari 1991, Introduction). I have also demonstrated that Marx's writings on the history of capitalism in the West leaves no doubt that he was not an economic determinist. His analysis of capitalist development shows clearly that capitalist relations of production and capitalist superstructure was already in place before the industrial revolution in England. He believed that industrial revolution created the suitable technology for capitalist mode of production (Shamsavari 1997a). From this one could conclude that socialist society would also develop an appropriate technological basis suitable to its requirements. I believe that this conclusion is valid. The technological revolutions under capitalism have shortened the labour time but they have not contributed significantly to the increase in free time available for human development. Even the invention of time-saving household consumer durables has plunged workers and their families deeper into work (an increase in absolute surplus value as women and children join the working force). As I will show later the technologies

developed under capitalism are only suitable for capitalist development. The point I wish to emphasize at this juncture is that although Marx did not think technology is neutral to mode of production in which it develops, a narrow interpretation of his broad and general formulation in his Preface to **A Contribution to the Critique of Political Economy** [1867] (Marx 1970) could easily lead to an opposite interpretation. It is important to recognize that what Marx mostly admired capitalism for was the creation of a world market and increase in the productivity of labour. These capitalism has achieved almost perfectly but not to the advantage of human development but further capitalist development. It is unfortunate that Engels and the economists of the Second International confused the socialization of labour and production under capitalism with socialism.

### **ENGELS ON SOCIALIZATION OF PRODUCTION**

Engels's view of the socialization of production under capitalism had a profound influence on the economists of the Second International and shaped their views on the nature of capitalism and transition to socialism. According to Engels the advance of capitalist development progressively involves a displacement of 'individual production' and the rise of 'social production'. This 'socialization' of production, however, is in conflict with capitalist private appropriation (Engels 1976, pp. 348-49). He also speaks of the '*contradiction between social organization in the individual factory and social anarchy in production as a whole*' (ibid. p. 368). By social anarchy of production he means 'unbridled competitive struggle', i.e. anarchy of the market. Engels proposes a series of such contradictions characterizing capitalism, which all boil down to the fact that while capitalism progressively 'socializes' production it keeps means of production concentrated in the hands of capitalists. Could one perhaps conjecture that he is implying a contradiction between forces of production and relations of production? To a large extent this is

true as he refers to the social nature of means of production and cooperative nature of factory work on the one hand and the private appropriation of the results of production on the other hand. But his analysis is not always consistent as he refers to the 'partial recognition of the social character of the productive forces imposed on capitalists themselves', as evident from development of joint-stock companies, trusts and the state ownership. (Ibid. p. 369).

Thus not only productive forces are progressively socialized, the forms of ownership increasingly take more 'social' forms as opposed to individual or family ownership. Thus the contradiction between productive forces and production relations are pushed to a limit leading to rigid and abstract opposition resulting in an apparent resolution of the contradiction.

If we are to believe Engels, all the major ingredients of socialism were in existence in late 1870s. I think Engels's analysis is based on a confusion between the capitalist form of socialization and socialization of production in general. This confusion is in a way quite understandable as capitalism historically represents the most socialized mode of production. However, according to Marx, all historical modes of production are *social* forms of production. The nature and extent of socialization changes from one mode to another. But the social nature of production is the most fundamental feature of human historical development. In Engels the opposition between 'individual' and 'social' production is so rigidly maintained that capitalism becomes identified with social and pre-capitalist forms with individual production.

## **THE ECONOMISTS OF THE SECOND INTERNATIONAL**

The economists of the Second International were on the one hand heavily influenced by the mechanistic interpretations of Marx's view of history (reinforced by Engels's work) and Marx's vision of the capitalist development. The role of economic (and particularly technological) development as the prime mover of historical change (in short the primacy of the productive

forces in shaping not only social relations of production but also the superstructure) led these economists to believe that the productive forces under capitalist mode of production had matured enough to be in contradiction with the social form of production. This was expressed, following Engels, in the dictum that under capitalism forces of production had already achieved a high degree of socialization while the ownership of means of production remained in private hands. This made the ideal of achieving socialism very easy. Following the overthrow of capitalist system of ownership all that had to be done was to make the already developed forces of production serve the purpose of socialism.

While one can make a strong case for the influence of the nature of capitalist development in late 19th and early 20th century on the writings of the economists of the Second International (including Engels) an equally strong case may be made in the opposite direction, i.e. that the very conception of the nature of the capitalist mode of production, especially compared with other modes of production, among these economists lied at the root of their response to the developmental tendencies of capitalism at a certain stage of capitalist development. The main foundation upon which this conception rested was the rigid and total conceptual opposition of the capitalist mode with pre- and post-capitalist modes of production. In this conception while the capitalist economy is totally ruled by the 'anarchy' of markets, where human will, plan or desire play no direct role, the non-capitalist modes are ruled by some kind of central direction in which human will and purpose (individual or collective) plays a more direct part. In the work of these economists the fundamental opposition between capitalist and non-capitalist economies were often expressed in two closely related ideas or 'images':

- a) The 'opacity' of the capitalist economy compared to the 'transparency' of non-capitalist economies.
- b) The irrelevance of the 'science' of political economy for the pre-capitalist economies and its

disappearance under socialism.

The following quotations represents a small sample.

In her pamphlet 'What is Economics', Rosa Luxemburg compares the capitalist economy first with a self-sufficient peasant economy and then with the household of Charlemagne. In both cases she reaches identical conclusions. In the first case production is directly oriented towards the needs of the community, the work is organised consciously based on the available resources and quantity of 'wealth' directly depends on the quantities of these resources.

As a matter of fact, all the relations in such a peasant economy are so *open and transparent* that their dissection by the scalpel of Economics appear indeed idle play.

(Luxemburg, n.d. p. 63, our italics)

In the case of the household of Charlemagne also the purpose or production is the satisfaction of human needs; there is division of labour but no commodities are produced and that the quantity of wealth depends on the quantity of factors of production.

Thus in all probability, we should not be able to think up any kind of mysterious problems for the science of Economics to analyse and solve there, in as much as all relations, cause and effect, labour and instrument are *crystal-clear* (ibid. p.66, our italics)

What is striking in both examples is the fact that the needs of human existence directly guide and determine the work, and that the results correspond exactly to the intentions and the needs, and that, regardless of the scale of production, economic relations manifest an astonishing *simplicity and transparency*. (ibid. pp. 67-68. our italics)

This transparency, simplicity, makes pre-capitalist economies accessible to the knowing subject without a need for 'science'. The latter is required only when the nature of the economy envelopes it into mysteries and riddles that need uncovering and solving. Such is the case with capitalism. The anarchy of markets transforms the results of human will, purpose and activity



into riddles and mysteries.

And it is precisely this anarchy which is responsible for the fact that the economy of human society produces results which are mysterious and unpredictable to the people involved... . Scientific analysis must discover ex post facto that purposefulness and those rules governing human economic life which conscious planfulness did not impose on it beforehand. (ibid. p. 80)

She then predicts that Economics will disappear with the demise of capitalism:

If Economics is a science dealing with the particular laws of the capitalist mode of production, then its reason for existence and its function are bound to the life span of the latter and Economics will lose its base as soon as that mode of production will have ceased to exist. (ibid. p.90)

We find the same trend of thought in Bukharin:

Only unorganised social economy presents such specific phenomena in which the mutual adaptation of the various parts of the production organism proceeds independently of the human will consciously turned to that end. In a planful guidance of the social economy, the distribution and redistribution of the social production forces constitutes a conscious process based on statistical data. In the present anarchy of production, this process takes place through a transfer mechanism of prices... . All these are characteristics of modern society and constitute the subject of political economy. In a socialist society, political economy will lose its *raison d'etre*: there will remain only an "economic geography"-- a science of the idiographic type; and an "economic politics"-- a normative science; for the relations between men will be *simple and clear*... .(Bukharin, 1969, p.49, our italics)

Preobrazhensky argues along very similar lines. For him

'Political Economy is the science which reveals the law of development and equilibrium

and (in part) the laws of decay of the commodity and commodity-capitalist mode of production, as a planless, unorganised mode of production. As opposed to capitalism socialist economy appears as planned economy in which the commodity of the capitalist mode of production is replaced ... by the product, value by the measurement of labour time, the market ... by the book-keeping of planned economy, surplus value by surplus product, so in the sphere of science political economy gives place to social technology, that is, the science of socially organised production.' (Preobrazhensky, 1965, p. 48)

No doubt all of these writers were strongly influenced by Marx's theory of 'commodity fetishism' as expounded in Chapter One of **Capital I**. However as we will see shortly this reliance on Marx was very one-sided and ignored other elements in Marx's theory of capitalist development. At this point we wish to emphasise that once the opposition between capitalist and non-capitalist economies is formulated in terms of a polar opposition between the 'anarchy' of markets and planned/organized production and furthermore this opposition is rigidly maintained then any sign of increase in planned or central direction or any diminution in the role of markets (as was occurring during the late 19th and early 20th centuries) is bound to be greeted as a negation or transcendence of capitalism itself (albeit within the capitalist shell, whatever that may mean). In fact the early 'revisionism' of Eduard Bernstein as well as the later theories of his ardent opponent Karl Kautsky (e.g. superimperialism to which Lenin strongly opposed) can be attributed to this conception of the capitalist system.

Let us now see if in fact this conception finds any support in Marx apart from his theory of fetishism.

As opposed to Adam Smith who advanced a single concept of division of labour embracing both the division of labour in the workshop and that in society at large (thus conceiving society as being similar to a 'giant factory') and for whom the difference between the two was a matter of

degree and scale Marx makes a qualitative distinction between the two. His criterion for this distinction was the absence or presence of commodity exchange. Thus the difference between the two divisions consists in that under capitalism social division of labour is mediated by commodities while the technical division of labour within the factory is not so mediated (Marx 1976, pp.474-475). This sharp distinction, however does not prevent Marx from recognising a dynamic relationship between the two:

Since the production and the circulation of commodities are the general prerequisites of the capitalist mode of production, division of labour in manufacture requires that a division of labour within society should have already attained a certain degree of development. Inversely, the division of labour in manufacture reacts back upon that in society, developing and multiplying it further. (Ibid. p.473)

Marx, in fact, goes beyond this perspective and characterises the division of labour within the workshop as 'an entirely specific creation of the capitalist mode of production' (ibid. p.480). Thus the factory, which is a sphere of 'direct' organisation and allocation of labour as opposed to the market place, far from being an 'island' in the great ocean of anarchy of market, is at the very centre of the social division of labour under capitalism (see Shamsavari, 1983, Chap.8). To present the capitalist mode of production as a system ruled completely by the anarchy of markets, thus, amounts to a misrepresentation of Marx's view of capitalism.

What was happening in the late 19th and early 20th centuries involved an increase in scale of production (e.g. via vertical integration). This implied the triumph of planning over the anarchy of market for these economists. Associated with the ideas expounded so far was also the notion that the enlargement of the scale of production (by 'bringing the workers together') implied greater socialization of labour and therefore heralded the birth of socialism as a completely socialized system of production. To identify the degree of the socialization of labour with the

scale of production is justified only in a limited way. One may, on the other hand, conceive of the scale of production as a reaction to lower degrees of the socialization of labour. Let us be more specific. Marx analyses the early phases of capitalist development in Britain as an evolution from the 'putting-out' system through handicraftsmen brought under one roof, the manufactory, leading up to the large-scale machine industry. Surely the necessity of bringing the handicraftsmen 'under one roof', which according to Marx, achieved increased productivity without a change in technology was result of the high costs of transportation and communication in general. Let us not forget that the premises of capitalist production are the scattered nature of labourers and their instruments of production. At this stage socialization of labour assumes the form of aggregation precisely because the starting point is fragmentation of labour and means of production which is costly due to the lack of the development of the infrastructure. Today, developing countries also exhibit a large degree of concentration of industry, technologically as well as geographically-- a fact much criticised by development economists as involving 'urban bias', capital-intensive technology, dualism and uneven income distribution. Thus in this case one can clearly see that large-scale production is not necessarily a sign of super-development but under-development. Similarly the early industrialisation drive in both Germany and Russia in the 19th century assumed highly concentrated forms of production, i.e. through the role of the state and in the case of Germany large investment banks (the 'Trotsky-Greshenkron effect').

Marx does indeed characterize capitalist production as large-scale, as cooperative and as socialized. This has to do with nature of capitalism as a system based on an unbound search for surplus-value. But to base any conclusions about the precise nature of the technical scale of capitalist units of production upon this observation is to confuse the social relations of a system with its technical basis. To identify any particular form that capitalist socialization of labour assumes in different stages of capitalist development with the specific essence of socialisation

under capitalism is bound to lead to the wrong conclusions about the nature of capitalist development.

Cooperation remains the fundamental form of capitalist mode of production, although in its simple shape it continues to appear as one particular form alongside the more developed ones. (Marx, *ibid*, p 454)

Here Marx is clearly distinguishing between co-operation as a fundamental basis of capitalism and the 'simple shape of co-operation' that may characterise an early phase of the capitalist development or function alongside more developed forms of co-operation. (see Shamsavari, 1991, Chap. Seven)

### **FROM THE OCTOBER REVOLUTION TO THE SPRING OF 1921**

In this period the SU economy was characterized by 'war communism', which involved direct role of the state not only in production but also distribution of goods. In more detail, it involved i) the policy of forcible requisition of agricultural surpluses by government; ii) nationalization of numerous industrial sectors; iii) abolition of private trade; iv) forced mobilization of workers and v) application of class and social principles to the distribution of income (Gregory & Stuart 1986). These policies replaced the market link between the urban and rural areas by administrative devices.

This period coincided with foreign intervention and civil war. The state of war more or less dictated/necessitated state intervention in the economy. This was not quite unique to SU. For instance, during the 2nd WW Britain went through a period of massive state intervention in production and distribution of civilian goods (eg. rationing of consumer goods).

But what was unique in the SU situation was that for some theoreticians war communism was the model of a socialist economy *a la* Marx, eg. total socialization of the economy accompanied by

the demise of money, markets and exchange--triumph of planning over anarchy of market. These included Preobrazhenski and Bukharin who had formulated the system of communism along these lines (Bukharin & Preobrazhenski 1969). As we have seen above there was a well-established body of literature from the economists of the Second International, which lent support to this line of thinking.

What was also unique in SU experience was the way in which various groups of party intellectuals interpreted the end of war communism. While for some the onset of NEP represented a temporary relaxation of the discipline of war communism, for others including Lenin, NEP represented the normal state of affairs in post-revolutionary stage in a country which was industrially less-developed and in which the agricultural sector was still the predominant sector employing the largest percentage of the labour force. Lenin in fact had advocated a policy similar to NEP in 1918 . Thus for Lenin war communism was not the appropriate model for post-revolutionary SU and that war communism was imposed purely by the state of civil war (Ehrlich 1960, pp. 3-4). Let us not forget that in this period land had been distributed among the mass of peasantry. The dominant social form in agriculture was small scale peasant farming. The liberated land-holding peasantry wished to improve their standard of living. This required favourable terms of trade between agricultural and manufactured goods.

The economic crisis that led to the adoption of NEP was a result of the fact that farmers could not obtain sufficient quantities of manufactured goods in exchange for their grain, a situation due to the shift in manufacturing sector from civilian to defence goods.

## **LENIN AND NEP**

The clarity of Lenin's view of NEP is quite extraordinary. It is a lesson not so much for socialist development in a developed country as it is for economic development in a less-developed

country.

Lenin's views were inspired by three circumstances:

- i) the economic backwardness of the SU
- ii) The non-occurrence of the expected and much-hoped for German revolution.
- iii) The failure of war communism in maintaining worker-peasant alliance which was the backbone of the success of October Revolution.

Now I shall elaborate these points.

I. In **Tax in Kind** (Lenin 1975, v.3), in which Lenin announced the NEP, the following major points are made:

- i) the recognition of the multiplicity of modes of production in the SU.
- ii) the possibility of bringing these together, through electrification (dismissed since this required revolution in the West).
- iii) the advantages of capitalism and state capitalism.
- iv) the advantages of trade links between industry and agriculture.

By giving priority to agriculture and links between agriculture and industry, Lenin demonstrated great insight in the process of development that anticipates much later debates after WWII on strategies of economic development in LDCs. For instance after decades of high growth in some of these countries in the 1970s it was clear that these countries were reaching their limits and only could continue by running huge foreign debt, while they were lagging behind some other countries in terms of indices of human development (income distribution, employment, health and education). This led to criticisms of these policies that for one author involved urban bias (Lipton 1977) and for others lacked any attention to `basic needs`. On the other hand countries that invested heavily in agriculture not only continued to grow within the tumultuous conditions of world economy in the 1970s and 1980s (eg. India and China) but also showed major

improvements in meeting basic needs. Pre-Soviet historical experience also shows that agricultural development was essential for industrialization. In Britain the commercialization of agriculture in 18th century (after the `enclosures') created a prosperous rural community with a penchant for manufactured goods. In the USA the land grant schemes created a large population of well- to- do farmers that constituted a strong home market for manufactured goods In Japan after the Meiji Restoration industrialization went hand in hand with agricultural transformation that involved the end of feudal system, improvement of seeds, irrigation and rural infrastructure. Thus Lenin not only had a correct policy towards agriculture that anticipated later debates on economic development in LDCs but also had a wealth of historical experience to support him (whether or not he was aware of this latter point is immaterial).

II. Like Marx and Engels before him, Lenin was an internationalist. He conceived capitalism as an international system and socialist revolution as global. Thus for him socialism was nothing short of an international system of production. His call before WWI was for world revolution (ignored by most of the Western social democratic parties). And even after the October Revolution he was still hoping for revolution in Germany which was the industrial power house of the Western Europe. By 1921 his hopes for such a revolution started to fade. It is clear from his writings in this period such as *Our Revolution* and *Better fewer, but better* Lenin 1975, v.3) that he could not foresee a socialist system for the isolated post-revolutionary SU. But what he was hoping for was a programme of reconstruction that would prepare SU for the eventual passage to socialism. The doctrine of `socialism in one country', a fabrication by Stalin to suit his own aims, would have been completely alien to Lenin. It is in this light also that NEP should be evaluated.

III. The policy of War Communism, discussed above, was successful in the limited aims of restoring production levels and distribution channels disrupted by the War and Civil War.



However with its administrative methods involving direct requisition of foodstuff from farmers without providing them material incentives in the form of affordable manufactured goods, it was threatening to shake the foundations of the October Revolution, which was based on worker-peasant alliance. This gives us a further cause to appreciate the importance of NEP that freed farmers from all administrative obligations, created a free market for farming output and imposed only a moderate, uniform tax in kind.

### **THE SOVIET INDUSTRIALIZATION DEBATE**

While NEP worked very well for a while in the sense of removing shortages of agricultural output, shortly after Lenin's death in 1924 problems started to re-emerge again. Shortages of manufactured goods again started to reflect in shortages of agricultural products. In the heydays of NEP as industrial production began to resume pre-war levels when soldiers filled the factories as workers, the newly acquired prosperity of the farmers (a consequence of the NEP) demanded greater quantity of manufactured goods than was possible to produce with the given capital stock in industry. This resulted in the 'goods famine' or what we today would call inflation. This situation sparked off the Soviet industrialization debate of the mid 1920s in which many eminent economists inside and outside the Bolshevik Party participated. This debate highlighted the dilemma presented by the NEP: Investment in the long-run would solve the 'goods famine'. In the short-run, however, sacrifices had to be made.

Although many divergent points of view were represented in these debates, two main opposing policies emerged, i.e. a continuation of NEP combined with requisite reforms and a programme of super-industrialization. Shanin and Bukharin favoured the first, while Trotsky and Preobrazhenski advocated the latter. Stalin first sided with Bukharin, but after the removal of Trotsky from power and his subsequent exile, Stalin embraced the super-industrialization policy

and went about it with a determination and ruthlessness which is rare in recent history (more on this below).

Bukharin and Shanin favoured an extension of the NEP: a peasant-driven form of industrialization in which goods would be produced cheaper in the industrial sector (thus easing inflation) through efficiency improvements in this sector in the short run and agriculture can become a source of capital accumulation in the country and thus ease capital shortage problem in the long run.

Shanin's arguments were based on two premises:

1. 'Short-term increment in real output to be derived from an additional ruble of investment (marginal output-capital ratio) in agriculture exceeded that of industry, especially in view of agriculture's surplus population and its low capital intensity.'
2. 'There was a higher propensity to save in agriculture than in industry.'

On the other hand, Preobrazhenski advocated a process of 'socialist' primitive accumulation, which would involve a heavy toll on peasantry in the form of higher taxes and collectivization that would generate sufficient surplus to renew, rebuild and add to the existing stock of capital goods in the industrial sector. Higher taxes on peasantry would ease inflation in the short-run and collectivization will help to expand industrial capacity at the expense of farmer's standard of living and thus eliminating inflation in the long-run. But the aim was not primarily to deal with inflation but essentially with massive industrialization and proletarianization of the peasantry, which were seen as essential ingredients of every socialist economy.

While, I personally, am not convinced that Bukharin's pro-agricultural policy would have worked in solving the problems of Soviet economy in the 1920s and lay the foundations for a future socialist system (as envisaged by Lenin), it is clear, from historical perspective, that the programme of super-industrialization brought disaster to Soviet economy and lay at the root of its eventual collapse in 1989. In what follows I will concentrate on the theoretical weaknesses of this

programme.

Preobrazhensky was very much influenced by Marx's reproduction tables in the 2nd volume of the **Capital** as well as his account of the capitalist primitive accumulation. Let us look at these points in turn. Marx's reproduction tables are very abstract models of capital accumulation under capitalism. These tables largely ignored the role of demand and the sphere of circulation. Marx's account of the primitive accumulation is based on the exploitation of labour (extraction of absolute surplus-value) prior to the emergence of industrial capital.

None of these two points are particularly relevant to socialist development. Nor are they necessarily relevant to economic development in a country where the majority of the work force is engaged in agriculture. And if we consider the case of SU after the October Revolution they become even less relevant as SU did not have any prospects for colonial exploitation. The truth is that Marx's account of primitive accumulation was based on the experience of early colonial powers that later embarked on industrialization (eg. Britain). The experience of industrialization in the USA and Germany in late 19th century show that such primitive accumulation was neither necessary nor sufficient for industrialization. In fact in the USA it is after the abolition of slavery in the South (a candidate for source of primitive accumulation) that US industrialization really took off.

Towards the end of 1920s, Stalin who had purged both Trotsky and Preobrazhensky under the banner of Bukharin's programme took up the former's mantle and embarked on a massive programme of industrialization on the basis of the collectivization of agriculture and huge technology borrowings from the West. It is difficult to judge whether Stalin's shift to the left was based on theoretical consideration (which I personally doubt) or was prompted by the urgency of Soviet industrialization in face of collapsing Western economies and the threat of war against the SU (I tend to favour the latter). But whatever the reasons, the whole process made a mockery of

all the theoretical foundations of Marxism and Leninism.

However, as the focus of this paper is to pursue possible links between Marx's view of socialism and the shape of the economic system that emerged in the 1930s in the SU, I shall now concentrate on issue of technology transfer and social relations of production in in this period.

### **TECHNOLOGICAL TRANSFER AND LABOUR ORGANIZATION IN SU IN 1930S**

Soviet industrialization in the 1930s (and later) relied heavily on technology transfer from Western countries on licensing agreement. This point is confirmed by a great variety of sources. According to Grossman (1971, p. 33) while the import of capital from the West was 'relatively minor', the import of capital goods as well as hiring of Western experts was enormous in 1920s and 1930s. According to Bergson:

'In transforming its productive methods under the five year plans, the USSR has been able to borrow technology from abroad on an extraordinary scale. Although in early stages the USA also obtained technology from abroad, the borrowing hardly could have been comparable to the USSR under five year plans'. (Bergson 1963, p. 34)

According to Powell:

'Soviet borrowings of Western techniques in the early years of industrialization were deliberate, extensive, and certainly consequential'. (Powell 1963, p.174)

And Kuznets:

'The foreign trade policy was an example, so characteristic of the economic growth of the USSR, of the combination of borrowing production tools and methods from abroad and withholding from the consumer the welfare benefits of these tools and methods.' (Kuznets 1963, p. 367)

The points made in the sources quoted above can be highlighted in the following way:

1. Import of Western technology in 1920s and 1930s was extensive and enormous.
2. Import of capital (finance) was negligible.
3. Import of western technical personnel was considerable.
  
4. Unlike the USA, which also imported a lot of foreign technology in its early phase of industrialization, SU continued to be dependent on imported technology beyond the 1930s and 1940s.
5. The imported technology did not improve the welfare of the Soviet consumer (specially the working class).

The above points paint a picture of soviet economy that at once is both (by now) familiar and at the same time still obscure. For instance, the abuse of the working class both at factory floor and the shopping centre is very well known and well documented (see Filzer 1986). What is not as widely known is the extent of Soviet dependence on (legally or illegally) imported technology. Thus a major authority on technology transfer refers to the SU alongside Japan as models of progress towards technological independence, compared for example with India (Stewart 1978, Chap.5). The secret of this policy, Stewart asserts, lies in a number of measures including use of licensing agreements instead of FDI, strict control of technology imports and considerable modification of imported technology. The evidence, as far as SU is concerned, does not support the thesis of technological independence. As we have seen technology continued to be imported and the modifications, if any, was not in any way to make it appropriate for socialist development.

The technology transfer from the West was completely consistent with mechanistic interpretation of Marx's theory of historical development, as is clearly evident in the writings of Engels and the

economists of the Second International. If we accept, as they believed, that productive forces by the late nineteenth and early twentieth centuries had reached a very high level of socialization, then the import of this `socialized' technology and combining it with `socialist' forms of ownership presented no problems.

However, as discussed, in Marx we find a very different view of the relationship between technology and social development. In **Capital I** Marx goes into a lot of detail as to how technology developed under capitalism to serve the requirements of capital, eg. total dependence of workers on capitalists through development of machinery and the concomitant de-skilling of workers. Thus capitalism develops capitalist technology.

The failure of SU as a socialist model is based on a confusion of the analysis of capitalist form of socialization of production with the advent of socialism. If we generalize Marx's analysis of capitalism in **Capital I**, it is clear that socialist relations of production will necessitate the development of a set of socialized productive forces appropriate to them- forces which will be entirely different from those found under capitalism- and which will reproduce them much in the same way that capitalist technology reproduces capitalist relations of production.

## REFERENCES

Bergson, A & Kuznets, S., (ed), 1963, **Economic Trends in the Soviet Union**, Harward University Press: Cambridge, Mass.

Bergson, A., 1963, National income, in Bergson & Kuznets (ed) 1963.

Bukharin, N., 1969, **Historical Materialism: A System of Sociology**, University of Michigan Press: Ann Arbor

Bukharin, N & Preobrazhenski, E., 1969, **The ABC of Communism**, Penguin Books, Harmondsworth

Bukharin, N., 1971, **Economics of the Transformation Period**, Pluto Press: London

Bukharin, N., 1982, **Selected Writings on the State and the Transition to Socialism**, Spokesman, New York

Callinicos, A., 1991, **The Revenge of History: Marxism and the East European Revolution**, Polity Press: Oxford

Engels, F., 1976, **Anti-Duhring**, Foreign Languages Press: Peking

Fukuyama, F., 1992, **The End of History and the Last Work**, Hamish Hamilton: London

Erlich, A., 1960, **The Soviet Industrialization Debate, 1924-1928**, Harward University Press: Cambridge, Mass.

Filzer, D., 1986, **Soviet Workers and Stalinist Industrialization**, Pluto Press: London

Fritz-Haug, W., *et.al.*,(ed), 1997, **Historical-Critical Dictionary of Marxism**, Vol.3, Argument:

Berlin

Gregory, P.R. & Stuart, R.C., 1986, **Soviet Economic Structure and Performance**, 3rd. edn.,

Harper & Row, New York

Grossman, G., 1971, **The Industrialization of Russia**, Fontana: London

Haynes, M., 1985, **Nikolai Bukharin and the Transition from Capitalism to Socialism**,

Croom Helm, Beckenham

Jabar, F.A. (ed) 1997, **Post-Marxism and the Middle East**, Saqi Books, London

Kuznets, S., 1963, A comparative appraisal, in Bergson & Kuznets (ed) 1963

Lenin, V.I., 1975, **Selected Works**, in 3 Vols., Progress publishers: Moscow

Lipton, M., 1977, **Why Poor People Stay Poor: A Study of the Urban Bias in World Development**, Temple Smith: London

Luxemburg, R., n.d., **What is Economics?**, Merlin Books: London

Marx, K., 1970, **A Contribution to the Critique of Political Economy**, Progress Publishers: Moscow

Marx, K., 1973, **Grundrisse**, Penguin Books: Harmondsworth

Marx, K., 1976, **Capital**, Vol.1, Penguin Books: Harmondsworth

Marx, K., 1978, **Capital**, Vol. 2, Penguin Books: Harmondsworth

Plekhanov, G., 1956, **The Development of the Monist View of History**, Moscow

Powell, R.P., 1963, Industrial production, in Bergson & Kuznets (ed) 1963

Preobrazhenski, E., 1965, **The New Economics**, Oxford University Press: Oxford

Preobrazhenski, E., 1973, **From NEP to Socialism**, New Parl Publications: New York

Shamsavari, A., 1991, **Dialectics and Social Theory: the Logic of Capital**, Braunton

Shamsavari, A., 1997(a), Simplicity and complexity: on the foundations of Marx's methodology,



in Jabar (ed) 1997

Shamsavari, A., 1998, Einfach/koplex, in Fritz-Haug (ed) 1997

Spulber, N., 1964(a), **Foundations of Soviet Strategy for Economic Growth: Selected Soviet Essays**, Indiana University Press: Bloomington

Spulber, N., 1964(b), **Soviet Strategy for Economic Growth**, Indiana University Press: Bloomington

Steele, D. R., 1992, **From Marx to Mises**, Open Court Publishing, La Salle: Ill.

Stewart, F., 1978, **Technology and Underdevelopment**, Macmillan: London

Zimbalist, A., *et. al.*, 1989, **Comparing Economic Systems**, 2nd.edn., Harxcourt Brace Jovanovich: London