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Oskar Lange's Economics and the Socialist Economy¹.

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Abstract: Oskar Lange is generally known about his contribution in the debate on the feasibility of rational economic calculation under socialism. Although he is recognized as the theoretical "winner" of this debate, his contributions to economics extend over a wide range of topics and involve issues such as the economic organization of a society in transition to socialism, the relevance or not of econometrics, the meaning of Say's law and the use of cybernetics for economic planning. There are two points that are fundamental in Lange's work, namely: (i) the economic viability of the socialist mode of production and (ii) the economics of the transition to socialism. The objective of the present article is to investigate Lange's contributions in regard of these two points: the economic viability of socialism and the economics of the transition to socialism.

Keywords: Oskar Lange, Socialism, Economic Planning, Law of Value, Market Socialism.

JEL Code: B10, B13, B14, B24, B30.

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INTRODUCTION

The tragic experience of Real Socialism in the XX century raises the question from where the ideas that once underlie the Real Socialist regimes came from. The simple answer is that they came from Marx, Engels and Lenin but there were other thinkers that made important contributions to socialist thinking. Some of these thinkers did not even use the labour theory of value or the infamous historical materialism but they used precisely the theoretical framework that came from the marginalist revolution of the late XIX century, namely they used the so-called bourgeois economics to sustain that socialism was a viable alternative to the capitalist mode of production. One of these thinkers was Oskar Ryszard Lange (1905-1965).

Oskar Lange was one of the leading economists of the 20th century. From his prolific career stands out the debate on the viability of rational economic calculation under the socialism waged by him, alongside other socialist economists, and the so-called “Austrian” school of Ludwig von Mises, Friedrich von Hayek and Lionel Robbins. Although he was notable for having been the theoretical "winner" of such a debate, his contributions to economics include a wide range of themes and involve issues such as the economic organization of a society in transition to socialism, the relevance or not of econometrics, the meaning of Say's law and the so-called "cybernetic planning". However, there are two points that are fundamental in Lange's work, namely: (i) the economic viability of the socialist mode of production and (ii) the importance of planning the social production of goods and services in a socialist economy.

The objective of this work is to investigate the main contributions of Lange regarding the two points just mentioned, namely the economic viability of socialism and the importance of economic planning in the transition economy. For this, this paper is organized into sections: the introduction, section 1 which deals with Lange's debate with the Austrian school of economics, section 2 which concerns the problematic of economic planning in a socialist economy and the last section, devoted to conclusions. The text is based on the article by Lange from 1936-1937, “*On the economic theory of socialism*”, for section 1, and in Oskar Lange's 1972 and 1989 works, “*Economía*

Socialista y Planificación Económica” and “*Problemas Fundamentales de la Construcción Socialista*”, respectively, for section 2.

SECTION 1

This section deals with Lange's debate with the Austrian school of economics and it is based on Oskar Lange's article “*On the economic theory of socialism*”, published in two parts, in 1936 and 1937. Before going into what Oskar Lange had to say in this debate, it is worth noting that he was in the first phase of his career one of the so-called “neoclassical socialists”. These economists had as their theoretical foundation the framework of the Lausanne school, the Walrasian general equilibrium. For Lange, the conciliation between bourgeois and Marxist economics is possible because bourgeois economics is capable of capturing the daily operation of an economy (monetary policy, credit policy, tax issues, placement of production sites, prices of monopoly, etc) in a way superior to Marxist economic theory. The latter, in turn, is able to explain the fundamental tendencies of capitalism in a way that bourgeois economics is unable to do so (LANGE, 1935: 191-192).

Oskar Lange's debate with the Austrian school of economics has Ludwig von Mises as its initial interlocutor. Heir to the tradition inaugurated by Karl Menger and Eugen Böhm-Bawerk, Mises brought up the theme of the viability of rational economic calculation under the socialist mode of production. Based on the lack of a market for capital goods in an economy in which the means of production are state-owned, Mises argues that the proper calculation of the prices of these goods is unfeasible. He says the following (MISES, 1981: 112-113):

Separate accounts for a single branch of one and the same undertaking are possible only when prices for all kinds of goods and services are established in the market and furnish a basis for reckoning. Where there is no market there is no price system, and where there is no price system there can be no economic calculation.

The gist of Mises' argument is that prices are exchange ratios established in the market, and these ratios can only be established if the exchanges take place between

private owners of the means of production. Therefore, if there is no market (as would be the case for capital goods in a society whose means of production are state-owned), it is not possible to establish prices and, consequently, economic calculation is impossible.

The opponents of Mises' arguments were the socialist economists, among which stood out Oskar Lange. The basis of his counterargument (established in his 1936-37 work) is that in a socialist society, even though the means of production are state-owned, the rational allocation of resources takes place because prices are not just exchange ratios between two commodities, but they are "*terms on which alternatives are offered*". Thus, if socialist planners have a scale of preferences (priorities in resource allocation) and knowledge about the amount of resources available, then the "*terms on which alternatives are offered*" are determined by the technical possibilities of transforming one commodity into another, that is, by the production functions. In this way, there is no impossibility of solving the basic economic problem of choosing between different alternatives.

After theoretically refuting Ludwig von Mises, Lange debated two theorists of the Austrian school (Hayek and Robbins) who did not discuss the theoretical possibility of rational allocation of resources in a socialist economy, but discussed the practical possibility of solving numerous simultaneous equations necessary for the rational allocation of resources. For these two Austrians economists the function of the market is to solve these equations and, consequently, to promote the allocation of resources in the economy, which would happen through the method of trial and error. Lange, in his 1936-37 work, attempted to elucidate two points: first, how the allocation of resources is done by trial and error in the market structure of perfect competition and, second, how a method similar to this is possible in a socialist economy.

On the first point, the model that Oskar Lange employed to debate with his interlocutors is the Walrasian general equilibrium model. In this case, market prices are presented as parameters for agents, as they are exogenous to them. The equilibrium value of these parameters is determined by successive series of trials and errors ("*tâtonnement*"). In this model, it is assumed that each agent maximizes its respective objective function. If supply equals demand in a certain market, then the price vector for that market is in equilibrium. Otherwise, competition between buyers and sellers will

change prices until supply and demand adjust and equilibrium is reached. As a corollary, there is at least one equilibrium price vector that balances supply and demand in all markets.

On the second point, Lange argues that if prices continue to fulfil their function of being parameters in a socialist economy then it is possible that the equilibrium price vector is obtained. The entity responsible for keeping prices as parameters for agents is the central planning body. Lange's algorithm is as follows: the central planning entity has to set prices, based on cost minimization and the optimal use of productive factors, and ensure that other economic agents do their accounting based on them. Treating consumer income as exogenous, then prices are the only variables that determine supply and demand. If the market price of a certain commodity is different from its equilibrium price, then, at the end of the accounting period, there is a surplus or shortage of the commodity in question. Therefore, any error of the central planning entity shows itself objectively: scarcity or excess of goods. Based on this indicator, the central planning entity is able to correct its errors and reach the equilibrium price vector, the one that balances supply and demand in each market. Note that in this model the central planning agency has a function analogous to that of the market in a capitalist economy of perfect competition: through a mechanism of trial and error, promoting marginal variations and observing their effects, it is able to reach the equilibrium price vector.

Therefore, in Oskar Lange's model the process that guarantees the efficient allocation of resources in a socialist economy is the same as the one in place in a capitalist economy of perfect competition. Therefore, it seemed at that time that the theoretical model of the bourgeois economists fit best an idealized socialist economy than the neoclassical ideal model of capitalism with pure competition because neoclassical perfect competition is really just an analytical tool and actually existing capitalism is not that of the idealized world of perfect competition, but that of imperfect and monopolistic competition. However, socialist economies indeed did exist and they were far from the idealized type which Lange envisaged in those papers of 1936 and 1937. The historical experience of actually existing socialist economies demonstrated that they were inefficient from the point of view of Pareto's concept of efficiency. The

Real Socialism regimes of the XX century maximized the welfare of privileged elites and their economies were wasteful and subjected to business fluctuations.

SECTION 2

Oskar Lange not only refuted the arguments of the Austrian school of economics, but also investigated the practical organization of a socialist economy and formulated a scheme (or model) of how socialist economic development would unfold. The present section deals with this and is based on LANGE (1972, 1989). This first book (LANGE, 1972) is composed of two articles “*La Economía Política del Socialismo*” and “*El Papel de la Planificación en la Economía Socialista*”. The text “*La Economía Política del Socialismo*” is basically the same one that was published in the book “*Problemas de Economía Política del Socialismo*” of 1989, whose original edition in Polish dates back to 1959 (LANGE, 1989). Take notice that there are English language versions of the works we reviewed here: LANGE, 1958 and LANGE, 1959.

Oskar Lange starts his theoretical scheme from the proposition that there are objective economic laws in a socialist society: such a society is subject to both the general laws of social development and specific economic laws. For Lange, as the transition to socialism proceeds, the specific economic laws of capitalism give way to the specific economic laws of the socialist mode of production. However, the emergence of a socialist society does not entail the end of economic laws. Lange argues (LANGE, 1972: 27-35) that such economic laws can be classified in four distinct types of laws: (i) general economic laws; (ii) specific laws of the socialist mode of production; (iii) intermediate laws; and (iv) laws of particular types of social superstructures. According to Oskar Lange, the essential difference in the performance of these laws under socialism, *vis-à-vis* capitalism, is that theoretically in a socialist society economic laws do not act erratically, but are guided by the organized society. In other words, Oskar Lange defends that the economic laws in the socialist mode of production are controllable by society and are not able to acquire their own logic as it happens in capitalism.

Under heading (iii) are the economic laws that emanate from the production of commodities. The law of value belongs to this category. According to Lange, in socialism these laws operate in a restricted manner because of the presence of the socialist sector of the economy whereas in capitalism these laws rule social production. For Oskar Lange, in a socialist economy, even though state-owned means of production allows for the allocation of a large part of resources by administrative means, these laws do not stop acting because production is still production of commodities. This is because the sale of the final product as a commodity makes the means of production assume a kind of quasi-commodity character, being still influenced by the law of value (LANGE, 1972: 32-33). For the conscious and intentional management of economic laws it is necessary to plan the economy and to plan the economic development trajectory. At this point Oskar Lange also made important theoretical contributions to socialist economics.

According to Lange, unlike the bourgeois revolution, which takes place when the capitalist relations of production are already mature, the socialist revolution precedes the establishment of socialist relations of production. This theory is what justifies the transformations of the socio-economic structure made by the State, because, in Lange's model, it is the State that takes away the social relations of capitalist production and paves the way for the dawn of the socialist mode of production. As a requirement for this dawn to take place is that the first stage of socialist economic development should have a strongly centralized economic planning, so that resources are concentrated on certain primary objectives, as the acceleration of the productive forces development.

For Lange, in this first phase of centralized economic planning there are two fundamental vectors in the construction of the socialist economy. One vector is the intervention of political forces in the economic process. The other vector is the role assumed by the sector of the economy that was already convert to state-owned property. It is this socialist sector of the economy that it is the heart of the planned economy. It serves also as an instrument to manipulate the development of the economy and assumes the role of an actor capable of influencing other sectors. By the influence of the socialist sector, the non-socialist sector (small producers, small artisans and private

businessmen) would become unable to influence the direction of the economy. For Lange, at some point these private producers would realize that it is interesting for them to join the socialist economy. Hence, the trend of the economy is towards a progressive atrophy of the non-socialist production relations.

In his model of socialist economic development, Lange establishes phases in which the economy goes through as it evolves towards a socialist developed economy. For Lange, the forms of organization of the socialist economy are not immutable. They change according to the different stages of development of the socialist economy, that is, socialist production relations take on new forms of organization *in tandem* with the development of productive forces. Also, socialist production relations vary according to historical circumstances. Centralized economic planning based mainly on administrative orders to allocate the resources of the economy should remain only during the first phase of socialist economic development. Lange warns that this first phase of the socialist economy is in fact a transitory phase, corresponding to a period of transition, and should not extend in time nor be confused with the essence of socialism (LANGE, 1972: 47).

In Lange's model, there are fundamentally two possible methods of ensuring that the economic plan is carried out. One method is through administrative orders and administrative resource allocation. As we saw above, this corresponds to the first phase of socialist economic development. The other method is via the use of "economic means", which, in Lange's theoretical model, consists in setting a system of incentives that induce agents to perform precisely the tasks required by the plan. Therefore, following the first phase of strict centralized economic planning there is the greater use of what he called "economic means". In other words, the maturation of socialist society brings with it the replacement of administrative and centralized management methods by methods based on the use of the so-called "economic means".

For Oskar Lange, the different management methods give rise to their own economic laws, specific to each one of them, and provide windows of opportunity for policymakers to act. In Lange's scheme, the socialist mode of production, the social ownership of the means of production, and the consequent (theoretical) absence of private interests to hinder the rational use of the means of production in accordance with

the social interest, allows economic development to be directed towards a trajectory in line with the needs of society as a whole. However, in order to launch the economy in such a path, it is necessary that exist the appropriate incentives for the organization and management of the socialist economy.

According to the Lange's model we are investigating, the specificity of production relations in socialism opens up the possibility of certain types of incentives. Incentives to workers must be designed so that the personal interests of workers coincide with the interests of socialist companies. For this to take place, Lange puts two conditions: one is that firms should have a certain degree of self-management and the other is that companies affirm their actions in the general interest of society. If this does not happen, incentives become inoperative and companies become bureaucratic, failing to adequately contribute to society's welfare. Hence, it follows that if a certain company does not act in function of social interest, but in function of a certain group, and if there is no effective participation of workers in the daily life of this firm, such company loses its socialist character and enters a process of degeneration (LANGE, 1972: 37).

For Oskar Lange, moral and political incentives are relevant in the first phase of socialist planning, in which the foundations of the planned economy are built. As soon as this phase is overcome, there is a predominance of economic incentives, with material rewards. Lange says that the carrying out of the economic plan's assignments should be based above all on the material interest of the workers in the profitability of the socialist enterprise and that profitability should become the basic criterion that would determine whether the company fulfils or not its so-called socio-economic tasks (LANGE, 1974: 136). Take notice that Oskar Lange is not concerned that material incentives to workers could undermine the so-called socialist *ethos*: for him, the management of the socialist economy generates its own laws of movement, distinct from those of capitalism, and the incentives, under socialism, are theoretically subjugated by the purposes of society and do not gain a logic of their own.

In Lange's model it is the process of gradual separation between economic management and political government that prepares the institutional conditions for the State to vanish. On this point, Lange reclaims Engels and says that the government of people should not be confused with the administration of things and the management of

production processes (LANGE, 1972: 38). Inevitably, according to Lange, this process of State disappearance is a gradual process, depending on the strengthening of the institutional and economic foundations of the socialist mode of production.

CONCLUSIONS

Oskar Lange was an important socialist economist. This work aimed to investigate the main contributions of Oskar Lange on two points: the debate on the economic viability of socialism and the organization of the economy in transition to socialism.

Regarding the first point, Lange (LANGE, 1936, 1937) elaborates an answer to Ludwig von Mises' objections regarding the economic unfeasibility of the socialist mode of production, due to the impossibility of carrying out rational economic calculation under socialism. The foundation of Lange's answer is found in the Walrasian general equilibrium model. From this, he draws a model in which socialism is not only economically viable but also efficient, in the sense of efficiency used by economists (the Pareto efficiency). In his model of a socialist economy, with freedom to choose both consumption and occupation, there is a market for consumer goods and a labour market, but there is no market for capital goods and other inputs. To overcome the difficulties that the lack of a free market would bring to the determination of the inputs' prices, Lange proposes that the central planning body monitor the stock of existing goods because the shortage or excess of goods indicates imbalances between supply and it is up to the planners, through a method of trial and error, to adjust prices. If it is assumed that there is only one set of prices that balances supply and demand in each market, then such a price vector would be within the reach of planners. In this way, the planning entity would fulfil a role similar to that of the market in the neoclassical model of perfect competition. Hence, the argument of the Austrian school that in the absence of a market for basic goods (as would be the case in a socialist economy, where the means of production are state-owned) rational economic calculation is impossible would no longer be valid.

As for the second point, according to Lange (LANGE, 1972, 1989), the organization of the economy in transition to socialism has in economic planning its fundamental point. This expresses Lange's idea that the socialist economy does not develop in an erratic way, but rather that its economic development is guided and directed by the intentions of the central planning entity (which represents in Lange's scheme society as a whole). In Lange's model, the socialist economic development trajectory has several stages: in the early stages of development of the productive forces, the economic planning would be centralized, with the aim of replace the capitalist relations of production and manipulate the non-socialist sectors of the economy. As the socialist mode of production develops, Langue argues that the centralized planning methods would give way to the decentralization of planning and the intentional use of economic laws. In a mature socialist economy, economic planning should determine the pace of growth and the trajectory of economic development and should establish economic incentives in such a way that the decisions of the decentralized units align with the central planners decisions.

In critical terms, it can be said that Lange showed that the preposterous model of pure competition works also in an idealized socialist economy. Lange demonstrated theoretically that the ideal model of economic efficiency advocated by bourgeois economists, the neoclassical model of perfect competition, is capable of being achieved with greater dexterity from a socialist economy as long as the bureaucrats in charge of economic planning can imitate the functioning of the market through a mechanism of trial and error. The disastrous fate of Real Socialism in the XX century, with the dreadful experience of the countries which embarked upon the construction of socialism, is a strong argument against the theoretical model of Oskar Lange.

About his view on the organization of the economy in transition to socialism, Lange pointed out that the style of economic planning must continually evolve, with increasing participation of workers in corporate self-management. For Lange, the socialist companies should be trustees of the social interests and it should take place the gradual separation of the management of the economic activities from the political affairs. If this does not occur, there is a risk of ending up in a process of degeneration. In XX century Real Socialism the style of economic planning did evolve as time went

by, but not at all in the direction of the democratization of the labour sphere. Real Socialism was characterized by authoritarian, bureaucratic and wasteful regimes.

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