

# Were the Socialists really wrong about Economic Planning?

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Abstract: Scholars of the Interwar Debate on Socialism argue either that Lange, Taylor, and Dickinson answered Mises, Hayek, and Robbins definitively or that they misunderstood the challenge they faced. This paper argues that Lange largely understood the challenge he faced, answered it directly *by conceding it fully*. He then denied rational economic calculation under Capitalism and asserted that market failures elevate Socialism above Capitalism.

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## Conflicting Accounts of the Interwar Debate over Socialism

Interpreters the Interwar Debate over Socialism seem to agree only to disagree<sup>1</sup>. Socialists accepted the ‘competitive solution’ developed by Oskar Lange, Fred M Taylor, and H. D. Dickinson as an answer to opponents of Socialism. While Mises forced them to address important practical issues concerning planning, the competitive solution proved his impossibility claim regarding Socialism wrong. These Socialists also downplayed the contributions of Hayek and Robbins as mere practical considerations concerning the ability of central planners to compile data.

Critics of this account of the Interwar Debate claim that the Socialists misread the challenge posed by Mises, Hayek, and Robbins<sup>2</sup>. Hayek attributed opposition to his position to a reliance on mathematical models that “disregard an essential part of the phenomena with which we have to deal” (1945 p91)<sup>3</sup>. Data relevant to economic planning is ever changing and dispersed among many minds<sup>4</sup>. A

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<sup>1</sup> The Mises’ original argument (1920, 1922) was that only profit and loss calculations reveal information on the value of investing in capital goods. The profit motive causes them to act upon this data, and invest in a relatively efficient manner. Communal ownership of capital thus precludes rational investment in capital.

<sup>2</sup> Lavoie (1985) argues that the Socialists first abandoned the earlier Marxist position and then retreated to a position where the Socialist state would aim at attaining competitive market conditions. Earlier, Hayek (1937a) claimed that Lange, Taylor and Dickinson admitted to the need for economic calculation and claimed merely that their ‘Competitive Solution’ could deliver the formal goal of efficient resource allocation under Socialism.

<sup>3</sup> He claimed that the proposed competitive solution comes out of “an excessive preoccupation with problems of pure theory of stationary equilibrium” [1948(1937a) p188] These static notions of competition leave “no room for the *activity* called competition” (1977 p 182 emphasis original). Static analysis assumes away essential characteristics of competition, which is the dynamic process where each acquires data on the plans of others as they adjust their plans with each other (Hayek 1948 p94).

<sup>4</sup> As a general proposition Hayek argued that the “tautologies of formal equilibrium theory can be turned into propositions that tell us something about the real world only in so far as we are able to fill those formal propositions with definite statements about how knowledge is acquired and communicated” [1948(1937b)]. Hayek admits, “if in the real world we had to deal with approximately constant data...then the ‘competitive solution’ would not be so entirely unreasonable. With given and constant data such a state of equilibrium could indeed be approached by the method of trial and error” (1937a). Hayek objected to the idea, advanced by

system where those who exchange goods agree on prices will adjust much faster than one where prices are “decreed from above”<sup>5</sup>. The actual problem we face is how to convey knowledge among many so that individual plans work together<sup>6</sup>. Competition in markets solves this problem by “extending the span of our control of economic resources beyond any single mind” (Hayek 1945).

Nutter (1983) denies legitimacy of Lange’s Competitive Solution as a response to the Calculation problem<sup>7</sup>. As Nutter put it-

It is invalid in the strict sense that there is a unique equilibrium regardless of how it is reached ... economies must be judged at least as much on their mechanisms for adjusting to changed circumstances as on their formal apparatus for pricing.1983 p 97

This reflects Hayek’s views on how individuals form expectations by adjusting data on local economic conditions, as well as Buchanan’s 1982 paper on how orders are defined by the processes that they emerge from<sup>8</sup>.

Lavoie (1985) argues that the Socialists based their “trial and error” response to Mises on a close analogy with perfect competition<sup>9</sup>. Kirzner (1985) argues that

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Schumpeter (1942) that the appraisal of goods by consumers automatically translates into the valuation of capital and labor. The value of factors also depends upon supply conditions. Demand and supply conditions are not given to a single mind, so there needs to be some way of communicating this data in a usable form among many minds.

<sup>5</sup> Hayek wrote that “if in the real world we had to deal with approximately constant data, that is, if the problem were to find a price system which then could be left more or less unchanged for long periods of time, then the proposal under consideration would not be so entirely unreasonable. With given and constant data such a state of equilibrium could indeed be approached by the method of trial and error”. (1937a p188)

<sup>6</sup> Buchanan (1969) stresses that costs exist only in the minds of those who actually forgo alternatives. Any attempt by central planners to make decisions for others would require these planners to ignore the costs that they themselves face, and choose concerning costs they never can know.

<sup>7</sup> Nutter’s objection concerns Lange’s claim that his trial and error process will provide socialist planners with the same information that capitalist planners possess. One cannot disentangle alternative productive methods from the existing price structure because equilibria depend upon the dynamic path through which they are reached, even if the starting points are the same for each process of adjustment. Nutter claims (p 97) that this is the only point worth stressing.

<sup>8</sup> Nutter stresses the lack of profit and *loss* under Socialism, and especially the “ultimate disciplinarian of bankruptcy”. Without dispersed power and responsibility real competition does not exist.

Lange mistakenly emphasized the parametric function of prices, and that this misses Mises's main point<sup>10</sup>. He asserted that Socialist planners will lack the incentives to perform this entrepreneurial function, and indicates that Lange was *unaware of this issue*<sup>11</sup>. Ebeling (1993) describes the Socialist victory in this debate as an illusion. Since Socialists held a different idea of how markets are supposed to work (perfect competition) from Mises (rivalrous competition) they never met his challenge. The Socialists 'won' by assuming away all of the knowledge and coordination problems that rivalrous competition in markets solve.

This paper argues that Lange largely understood and addressed the challenge posed by Mises. The first section asserts that he restated points that Mises had already conceded, and understood some of the dynamic and informational issues. The second argues that Lange *conceded* Mises' calculation critique of Socialism, and then denied rational economic calculation under Capitalism. With Capitalism and Socialism both failing in terms of capital he used externality, monopoly, financial instability, and Public Choice arguments to promote Socialism. The final section considers the validity of Lange's arguments.

### **Mises and Lange on Consumer Goods**

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<sup>9</sup> Since perfect competition does not explain dynamic price adjustment in response to changing market conditions, "Lange's model does not constitute an answer to Mises" (ibid p 46).

<sup>10</sup> In Kirzner's view, entrepreneurial alertness to profit opportunities work to bring markets towards equilibrium. The concept of perfect competition *assumes* that this adjustment process has been carried through to its conclusion without explaining how he asserts that "Lange failed to recognize that the distinctive aspect of the market is the manner in which prices *change*" (1985 p31 emphasis original).

<sup>11</sup> This is consistent with Mises's (1949) dismissal of the notion of central planners playing market to make Socialism work.

In his original paper on Economic Calculation, Mises claimed that trading ration coupons or barter establishes consumer prices, and that central planners would have to pay attention to these prices<sup>12</sup>. Mises claimed that-

“Variations in exchange relations in the dealings between comrades will therefore entail corresponding variations in the administrations’ estimates of the representative character of different consumption goods. Every such variation shows that a gap has appeared between the particular need of comrades and their satisfactions because in fact, some one commodity is more strongly desired than another.” (Mises 1920 p 7)

Mises conceded that central planners would observe excess demand or supply, or gaps, for consumer goods and adjust production accordingly<sup>13</sup>.

Mises specifically mentions that central planners can ascertain market conditions for consumer goods, but *not* for capital goods.

“At best it [the socialist administration] will only be able to compare the quality and quantity of the consumable end product produced, but will in the rarest of cases be in a position to compare the expenses entailed in production” (1920 p22)

Such comparison of quantity will surely reveal rising or falling inventories, but this is not the problem that Mises saw as important<sup>14</sup>.

Lange argued that central planners would monitor inventories for consumer goods<sup>15</sup>. This would substitute for private profit and loss statements<sup>16</sup>. As Lange

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<sup>12</sup> As an example, Mises argues that if consumer preferences dictate an exchange ratio of 1 cigar to five cigarettes, and the central planning board sets the official relative price at 1-3, those who obtain cigars in their ration will benefit at the expense of those who received cigarettes.

<sup>13</sup> As Mises put it “Articles in greater demand will have to be produced in greater quantities” (ibid p7-8). Mises specifically states in his cigar-cigarette example that with the wrong relative prices set by authorities “cigars or cigarettes would pile up in the distributing offices”.

<sup>14</sup> Mises also mentioned that quality considerations can factor into these judgments.

<sup>15</sup> Hayek mentions [1948 (1937a) p129] that Lange and Dickinson both rely on competition to determine *relative* prices of goods. Rothbard [1997(1991) p414] also mentions that Lange focused on consumer rather than capital goods. Lange indicates that his trial an error method pertains to consumer goods in his discussion (p57) of the determination of equilibrium. He writes that consumers maximize total utility by equating the marginal utility of income spent on all commodities. He also mentions that individuals maximize their returns to the

put it “any mistake by the central planning board would announce itself in a very objective way: by a physical surplus or shortage” (1936 p64). This is identical to what Mises wrote in 1920 about gaps between supply and demand.

With respect to production, Lange proposed that the authorities impose rules.

“there are certain rules imposed on (managers of production) by the central planning board which aim at satisfying consumers’ preferences in the best way possible. One rule must impose on each production plant the choice of the combination of factors of production and the scale of output which minimizes the average cost of production. The output of the whole industry must be determined by the rule to produce exactly as much of a commodity, no more no less, than can be sold to consumers or “accounted for” to other industries at a price which equals the average cost of production. The first rule replaces the private producers aiming to maximize his profit... The second rule replaces the free entry of firms into an industry or their exodus from it.” (Oskar Lange 1936 p62)

Those who claim that Lange thought only in terms of static equilibrium likely do so because of passages like this. It is important to note two things. First, Lange mentions only the *employment* of factors rather than their *accumulation* though time. His references to minimizing total cost assume a given capital stock. The only prices that his Competitive Solution establishes are relative values for

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ownership of productive resources. Absent from this discussion is any mention of time preference or capital accumulation. One might argue that relative prices for consumer goods reveal much regarding the relative demand for capital goods and labor between industries. It is also true that data on time preferences constitute an indispensable part of the calculation of opportunity costs for capital and labor.

<sup>16</sup> Kirzner emphasizes disequilibrium prices with respect to opportunities for arbitrage, while Lange emphasizes excess supply and demand. Both point to actions that move towards equilibrium conditions. Lange’s argument that planners will raise and lower prices assumes much regarding the motivations of planners, but it is clear that Lange thought that planners could be instructed to recognize and act upon disequilibrium in markets. It is clearly the case that the errors that Lange believes that Socialist planners will correct in successive trials are a matter of disequilibrium and must be noticed for these trials to work as intended. Reports on inventories would (ideally) inform Socialist planners under Lange’s proposal regarding the character of prices. This is equally true in Kirzner’s world. Disequilibrium prices make their character known to entrepreneurs through their influence on inventories. The issue of arbitrage requires the recognition of a more complex situation where disequilibrium exists between different local markets. This issue never concerned the cognitive abilities of entrepreneurs relative to Socialist managers. It is instead the motivations that matter. As Buchanan (1969 p97) put it “even if the problems of calculation are totally disregarded, the Socialist System will generate efficiency in results only if men can be trained to make choices that do not embody the opportunity costs that they, individually and personally, confront.”

consumer goods. This establishes a complete accounting for rates of substitution between consumer goods, rather than between time periods. He addresses the issue of accounting for rates of substitution between time periods (time preference) latter. Second, Lange is describing his goal for policy in static terms, but this does not imply failure to appreciate dynamic problems in attaining that goal. In mentioning the need to close gaps, Mises describes the same general goal for policy, albeit with less detail.

The explicit purpose of this section of Lange's paper was to "elucidate the way in which the allocation of resources is affected by trial and error on a competitive market and to find out whether a similar trial and error procedure is not possible in a socialist economy" (1936 p 57). Lange and Mises both indicated that Socialist authorities could monitor inventories. While Lange clearly thought in terms of competitive equilibrium as an end goal, his reference to *trial* and *error* indicates that he had some understanding of adjustment processes towards equilibrium.

Lange argued that Hayek and Robbins offered practical objections to Socialist Calculation<sup>17</sup>. Lange erred in thinking that this position was a mere practical consideration. However, he was responding to the idea that calculations had to be made concerning ever changing data. Lange specifically mentions that Hayek and Robbins saw the function of the market as "to provide a method of allocating

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<sup>17</sup> He quoted Robbins in particular as writing that by the time a central planning board actually performed the necessary calculations "the information on which they were based would have become obsolete and they would need to be calculated anew" (1936 p56).

resources by trial and error” (ibid). What else could errors mean but disequilibrium? Lange describes specifically how excess demand (supply) causes prices to rise (fall) and “As a result of this we get a *new set of prices* which serves as a new basis for individuals striving to satisfy their subjective equilibrium conditions”. He goes on to write “If demand and supply are not equal... prices change again and we have *another* set of prices which serve as a basis for individuals rearranging their choice”. This striving and rearranging clearly refers to a process of price adjustment in markets towards competitive equilibrium, though he does not seem to grasp Hayek’s arguments regarding information.

While Lange does refer to objective equilibrium conditions, he argues that “*historically given* prices serve as a basis for the process of successive trials”. These trials go on “until equilibrium is finally reached.” In a footnote Lange also refers to the speed of quantity adjustments. The faster adjustments proceed according to “Marshallian adaptation” with short run supply curves. Slower ones proceed according to “the cobweb theorem” “as in the case of crops” (1936 p60)<sup>18</sup>.

While Lange failed to see the problem of conveying fragmented and ever changing contextual data, he had some conception of a dynamic process of price adjustment. This process does pertain to the issue of how individuals acquire data on each others plans. Inventories take the place of relative prices in revealing data concerning consumer preferences. Lange’s notion of successive

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<sup>18</sup> This reference to cobweb price adjustments is interesting because of the importance of expectation formation in such models of markets.



trials to correct errors is consistent with the notion that data is initially dispersed and must be revealed *and adjusted* through actual exchanges. By arguing that Socialism can operate according to a similar trial and error process, he indicates that Socialist authorities will come by pertinent data only by recreating the context of a competitive market.

Hayek correctly emphasized the contextual nature of practical economic knowledge. He also advanced our understanding of the equilibration processes in markets. However, we must remember Lange's claim is that the central planning board market could recreate the context of actual competitive market conditions through the imposition of particular rules. He admits that central planners lack specific data on the results of actual competition and will learn this data only by simulating this context accurately through trial and error<sup>19</sup>.

Hayek accepted the notion that local managers under socialism could possess the same information as capitalist managers regarding production functions (1937a p202). He rejected the notion "that all this knowledge can be effectively conveyed to and used by the planning authority in drawing up the plan" (ibid).

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<sup>19</sup> Lange defined the parametric function of prices in the following passage- "although prices are the result of behavior of all individuals on the market, each individual separately regards the actual market prices as given data to which he must adjust himself" (p59 1936). Hayek and Kirzner correctly recognize that this refers to perfect competition and needs further explanation. However, Lange does refer to individuals adjusting their behavior to objective price data, as well as to the combination of individual such efforts leading to price formation. This is not far off from Hayek's argument (1937b) that each must form plans that contain relevant data from the plans of others, and that competition prompts mutual plan adjustment.

However, the primary role that Lange assigned to the Central Planning Board was to enforce general rules, “which aim at satisfying consumers’ preferences”<sup>20</sup>.

Lange possessed a *partial* understanding of the dynamic problems at hand, but was naïve regarding the ability, or even willingness, of central planners to recreate market conditions without private property<sup>21</sup>. Lange’s failure to see the importance of the profit motive in motivating entrepreneurs is more serious<sup>22</sup>.

There are two important facts to note. First, Lange’s emphasis on inventories is essentially the same as Mises’ point on recognizing gaps. He erred in failing to see that Mises had already made this point. Second, Lange explicitly set out to demonstrate the existence of an equilibrating process under Socialism. He understood part of the process of price adjustment in competitive markets, and knew that Socialism could match the performance of markets only by working in a similar way. The contention by some that Lange thought only in static terms that ignored the real challenge posed by Mises underestimates Lange’s understanding of dynamic issues.

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<sup>20</sup> Lange argued that to follow these rules local managers would be guided by market prices for consumer goods and labor. In all other cases the Central Planning Board fixes prices (p78).

<sup>21</sup> Hayek (1937a p187) dismisses the notion (from Dickinson) that an ‘omniscient and omnipresent’ dictator could replace the spontaneous order created by market participants. This would require omnipotence. When examining the functioning of the actual apparatus by which a central authority adjusts all prices it becomes evident that a centrally planned system will not even approach a decentralized competitive system. The omnipotent, omnipresent, and omniscient dictator could perform price changes instantly, the real dictator must work through an imperfect administrative apparatus- one that will never match the actions of those on the local scene. Lange did, however, acknowledge that bureaucratization did pose a threat to the proper functioning of a Socialist society.

<sup>22</sup> This still pertains to the informational problem, as different incentives will lead to different results- knowledge of these results being particular to the processes that generate them. As Buchanan (1982) put it “the ‘order’ of the market emerges *only* from the process of voluntary exchange among participating individuals. The order is itself defined as the outcome of the *process* that generates it. The ‘it’, the allocational-distributional result, does not, and cannot, exist independently of the trading process.”

Lange's trial and error method solves only that part of the problem that Mises conceded. If Lange saw his proposal, at this point, as having refuted Mises, then one could conclude that he failed to understand Mises' challenge regarding capital goods. It is, however, the case that Lange was merely trying to establish that Socialism could work as effectively as Capitalism in approximating the goal of establishing relative prices for consumer goods and *relative* demands for capital and labor, given some discount rate<sup>23</sup>. While Lange expressed thoughts similar to those of Mises concerning consumer goods, this does not prove that he understood his arguments concerning capital goods. The validity of Lange's response now depends upon whether he understood and addressed Mises on capital and time preference.

### **The Distributional Critique of Capitalism**

The problem that Mises addressed was in accounting for the opportunity costs of investing in capital- that being the value to consumers of the more immediate consumption they defer when resources get invested in capital goods that satisfy less immediate consumer demands<sup>24</sup>. Specifically, profit and loss statements reflect relative consumer demands through the revenue side of profit and loss statements. Consumer spending provides the means for entrepreneurs

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<sup>23</sup> It is also worth noting that Lange apologized to his readers for presenting what he considered a "textbook exposition of the elements of the theory of economic equilibrium" (1936 p60). He did this because he thought that "the possibility of determining prices under socialism had been denied". This indicates further that he failed to recognize that Mises had already dealt with the problem of determining the relative prices of consumer goods, and in a manner similar to Lange's exposition.

<sup>24</sup> Or, you could think of it as a problem of how to discount the value of future production that derives from capital investment. It is of how to account for the relative demand for goods at different time periods rather than the demand between goods at any particular time period. Mises understood that profit and loss statements would reflect both relative demands between goods and consumer time preferences.

to bid for factors. This bidding transfers data from consumer goods markets to markets for capital and labor<sup>25</sup>. Here the Competitive Solution might incorporate consumer values into factor allocation reasonably well<sup>26</sup>. The interests of owners of factors of production get incorporated into production decisions based on their responses to these bids, where the opportunity costs of leisure and non pecuniary labor compensation are incorporated through wages ( $w$ ) and time preference is incorporated through interest rates ( $r$ ). Lange assumes free choice of occupation, so planners might have data on the opportunity costs of labor<sup>27</sup>. Incorporating the cost of deferring consumption for investment is a different matter. Private ownership of capital and free contracting for labor imply that profit calculations will reflect both labor interests and the cost of deferring consumption by consumers, as we see here-  $\Pi = PQ - C(w, r)Q$ . Communal ownership of capital raises problems with discerning time preferences without the 'r' in this formula. How then do central planners invest in accordance with consumer time preferences?

Lange admitted that two problems "deserve special attention". First, the distribution of the social dividend on capital investment must not interfere with the optimum allocation of resources. Second, the central planning board must set

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<sup>25</sup> This is what Hayek meant by 'extending the span of our control over resources beyond any single mind'. Consumers control the use of capital and labor even though they make no direct judgments of value in those markets.

<sup>26</sup> This assumes away the Public Choice issues mentioned by Buchanan (1969). Central planners would have to become 'economic eunuchs' who ignore their own interests and instead promote the general welfare of society.

<sup>27</sup> This holds true only if we ignore the time element in wage determination. Wages equal the *discounted* marginal product of labor. The allocation of labor towards satisfying more and less immediate satisfactions requires the discounting of wages according to consumer time preferences. The question of how central planners incorporate time preferences therefore applies to the employment of labor, but Lange did not see this.

capital accumulation rates. Lange acknowledges that the logic of supply and demand also applies to investment. He explicitly identifies the problem as a long run phenomenon, where the capital stock is *variable*, as opposed to the static problem he mentions earlier of allocating capital. He clearly moves past static notions of resource allocation at this point. Lange claims that before distributing the social dividend, central planners will “determine the rate of capital accumulation arbitrarily”. Lange recognizes that interest rates in credit markets reveal time preferences- the key factor in determining optimal rates of capital accumulation<sup>28</sup>.

“The arbitrariness of the rate of capital accumulation “corporately” performed means simply that the decision regarding the rate of capital accumulation reflects how the Central Planning Board and not consumers, evaluate the optimum time shape of the income stream.”  
Oskar Lange, *On the Economic Theory of Socialism I* pp 65

His statement that the time shape of income streams get set arbitrarily by central planners and not by consumers is nearly equivalent to Mises’ claim that planners will face calculational chaos in allocating higher order goods. The key difference between Mises and Lange is that Mises emphasizes the importance of the absence of private profit and loss calculations while Lange emphasizes the absence of private saving. This

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<sup>28</sup> There is an interesting difference between Lange and Schumpeter on this point. Schumpeter claims that a definite amount of money income “could be allocated to every comrade” (1954 p988). Each would be free to spend according to his preferences and save through the “ministry of production”. This ministry would pay a premium, or interest, for deferring consumption. Lange correctly notes that any remuneration to private interests is inconsistent with the principles of a socialist society (936 p ). Private returns on investment automatically imply a de facto set of private property rights (if not de jure) concerning the means of production. A Socialist economic system that has free trade in consumer goods, free choice in occupation, and private returns to capital investment differs from Capitalism in little more than name. The main difference is in the political regime. Schumpeter, like Lange, assumes that Socialist authorities ignore their own interests and focus instead upon serving private citizens.

means that the demand side of credit markets disappears. By assuming that local planners will act as if they profit maximizers Lange assumes away problems on the demand side of credit markets<sup>29</sup>. Lange correctly asserts that private remuneration for deferred consumption is inconsistent with the principles of Socialism, so Socialist beliefs eliminate the supply side of credit markets, and thus make the revelation of marginal rates of substitution between time periods.

Lange does discuss systematic biases in prices and allocation due to monopolies and externalities in other parts of his response. His use of the word 'arbitrary' indicates something other than systematic bias. It indicates that planners do not know what the rate of accumulation should be, and thus grope in the dark amidst a bewildering array of alternatives for capital investment.

Mises and Lange both recognized a problem inherent to Socialism concerning capital goods. One termed the results of socialist efforts to set capital accumulation rates chaotic, the other as arbitrary. From Mises' perspective, the inability of socialist planners to discern the opportunity costs of capital investment would leave them with no alternative but arbitrary decisions. From Lange's perspective, the arbitrary actions of

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<sup>29</sup> Hayek [1948 (1937a)] and Mises [1998 (1949)] were particularly critical of socialists for making such assumptions.

planners concerning investment would lead to outcomes easily described as chaotic<sup>30</sup>.

Lange did recognize that this is a serious problem.

“One may argue, of course, that this will result in a diminution of consumer welfare. This difficulty could be overcome only by leaving all accumulation to the saving of individuals. But this is scarcely compatible with the organization of a socialist society. *The loss of his power to set the rate of capital accumulation is the price the consumer has to pay for living in a socialist society.* It seems to us that this price would be overcompensated for by the advantages a socialist society offers,” Oskar Lange, *On the Economic Theory of Socialism I* pp 65-66 emphasis added

If Lange thought this diminution trivial, he would not have mentioned the need for such compensation. One can ignore trivial losses easily<sup>31</sup>. The fact that he thought it necessary to assure his readers that Socialism would deliver overcompensation for this diminution indicates further that he saw this problem as significant. That he saw this problem deserving *special* attention further indicates its importance to him.

Lange makes this point here-

Against these advantages of a Socialist economy, one might put the disadvantage resulting from the arbitrariness of the rate of capital accumulation, if accumulation is performed “corporately”. A rate of accumulation which does not reflect the preferences of the consumers as to the time-shape of the flow of income may be regarded as a diminution of consumer welfare. But it seems that this deficiency may be regarded as overbalanced by the advantages enumerated. Besides, saving is also in the present economic order determined only partly by pure utility considerations, and *the rate of saving is affected much more by the distribution*

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<sup>30</sup> Lange differs from Dickinson on this point. Dickinson (1933 p244) claims that it is possible for a central planning board to construct an aggregate demand schedule for capital goods to plan investment. The method he proposes merely assumes that these calculations contain relevant data on consumer preferences. Dickinson does not explain how the authorities come by this knowledge. Thus, Dickinson, unlike Lange, seems not to understand the challenge posed by Mises.

<sup>31</sup> Even if Lange thought this issue trivial as compared to the establishment of relative prices for consumer goods, there is no reason for us to ignore the importance of capital accumulation.

*of incomes, which is irrational from the economists point of view*" Oskar Lange  
On the Economic Theory of Socialism, Part II p 127 emphasis original

This passage is absolutely crucial in interpreting Lange's argument. The supposed historical and arbitrary nature of income distribution under Capitalism makes determination of the income stream irrational, in his view<sup>32</sup>. The advantages that Lange enumerates consist of first; the ability, under socialism, to "put *all* alternatives into economic accounting and take into the cost accounts all the accounts sacrificed", and second; the elimination of the "wastes of monopolistic competition". The first claim pertains to externalities, and Lange links it to the business cycle and failures to account for leisure, safety, and agreeableness of work in wages. The second obviously refers to monopoly pricing. The avoidance of these problems under Socialism are not, however, what Lange means to emphasize in his response to Mises. Lange merely claims that the elimination of these problems under socialism will *likely* outweigh the diminution of consumer welfare that derives from arbitrariness in the accumulation of capital, as the irrational nature of income distribution under Capitalism makes Economic Calculation impossible under Capitalism too.

Lange wrote in the same paragraph that "the real danger of socialism is that of the bureaucratization of economic life, and not the impossibility of coping with the problem of allocating resources" (Lange 1937 pp 127-8). Standing alone, this line appears as a denial to Mises' calculation critique. Taken in the context of the preceding paragraph, it indicates that while Lange admits while there is no

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<sup>32</sup> Lerner (1934 p 56) asserts an arbitrary nature for interest rate determination in any society.



rational basis for allocating capital under Socialism, the same is true under Capitalism- other factors decide the issue.

The emphasis that Lange placed on how income distribution affects capital accumulation under Capitalism indicates that he saw this specific issue as highly relevant to it. This indicates that Mises was right to argue that there is no rational basis for calculating opportunity costs for capital under socialism, though it is not clear that Lange realized this himself. His allegation concerning the alleged irrational nature of income distribution under Capitalism implies that no such basis exists under Capitalism either.

In other words, Lange argued that our choice is between Socialism, where a handful of central planners arbitrarily fix rates of capital accumulation and Capitalism, where arbitrary income distribution determines capital accumulation according to the dictates of a handful of wealthy capitalists. Mises claimed that markets make use of the widest range of information concerning the use of resources because market prices incorporate the values of practically all members of society (Ebeling 1993 p89). Lange's argument that interest rates reflect the time preferences of a wealthy elite alone challenges this claim by Mises. Both systems would thus discount the time preferences of the vast majority in favor of a tiny minority. When in an indefensible position, one must either surrender or give up the fortress to find better ground on which to fight. Lange chose to give up the position of defending rational economic calculation under Socialism and turned to attacking the position of rational economic calculation under capitalism, so as

to regain the initiative. He then hoped to deliver the coupe de grace with standard market failure arguments<sup>33</sup>.

It is important to note that Lange mentions free choice in consumption and occupation alone. Lange mentions specifically that a market for *consumer* goods would emerge in any civilized socialist society (1936 p 70). In trying to expand his argument Lange wrote that the state could act according to the preferences of bureaucrats, rather than of consumers within the context of his solution (ibid p68). In this section he claims to have demonstrated “the economic consistency and workability of a Socialist economy with free choice neither in consumption nor occupation, but directed rather by a preference scale imposed by the bureaucrats in the central planning board” (ibid p70). Conspicuous is the absence of any mention of capital accumulation.

Interpreters of both side of the debate wrongly emphasized the importance of the ‘trial and error’ part of Lange’s response. Socialists were not far off in thinking that Lange had placed both systems on an even plane in terms of theory- with respect to consumer goods (though they failed to realize that Mises had already done this). Critics of this solution were right to examine the process of price adjustment in greater detail, but also erred in thinking that Lange saw “his” trial and error method as a response to the *actual* problem at hand. Lange explicitly wrote that he was responding to Hayek and Robbins on their doubts

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<sup>33</sup> One could also argue, from Lange’s perspective, that monopolies concentrate wealth into the hands of a few Monopolists, and make the distributional problem even worse.

concerning the existence of a trial and error method under Socialism<sup>34</sup>. It was therefore pointless for latter interpreters, like Kirzner and Lavoie to argue that the Competitive Solution did not address the challenge posed by Mises. This was not his aim in that section of his response. Lange did claim to have moved past the original issue raised by Mises, when he wrote that “ the position taken by Hayek and Robbins... promises a much more fruitful approach than Professor Mises’ wholesale denial of the possibility of economic accounting under socialism” (1936 p 56). Lange wrongly interpreted Mises’ argument as a wholesale denial of economic accounting under Socialism, as Mises specifically argued that Socialist authorities could account for marginal rates of substitution for consumer goods. However, Lange admitted to the same partial accounting under Socialism, arguing instead that neither system accounts for marginal rates of substitution between time periods.

The fact that Lange referred back to the time preference/interest rate issue in his second article also indicates its importance to him. Lange wrote that both the distribution of social dividends and interest rate determination deserved special attention. However, Lange focused more of his attention on the latter. This indicates that he saw this problem as more germane to the discussion at hand. Lange made it clear that the dividend issue was an incentive issue concerning bias. He thought the distribution of this dividend might bias allocation. By

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<sup>34</sup> Hayek quotes Lange [1948(1937a p 197) as arguing that planers must treat prices as constant, as entrepreneurs treat them in competitive markets. This supports the view that Lange lacked an understanding of the process by which we adjust towards equilibrium. However, Lange wrote this on page 63, just before the special attention that he devotes to the issue of capital accumulation, beginning at the bottom of page 64.

arguing that Socialist authorities would act arbitrarily Lange indicates that the problem of determining the rate of capital accumulation concerns a lack of knowledge of consumer time preferences, rather than an incentive problem concerning bias in allocating capital.

Lange claims that Socialism would strike the right balance in estimating the *urgency* of consumer needs (p 125, 1937). Mises' use of this word referred to the element of time. However, Lange uses this term in reference to interpersonal comparisons of utility. Social welfare is higher under Capitalism when the elite have a higher income if they are more 'sensitive'<sup>35</sup>. Urgency here refers to the relative importance of satisfying different members of society rather than the urgency in satisfying some demands sooner than others. Lange also claims that by concentrating wealth into the hands of a few, Capitalism can introduce constant error (1936 p125). The people with the highest incomes might not have the highest marginal utility of income. By eliminating classes and equalizing incomes, such errors under socialism would depend upon individual character alone<sup>36</sup>. Errors in income distribution under Socialism would then be random rather than arbitrary as under Capitalism.

Lange claimed that Socialism would "put *all* alternatives into economic accounting and take into the cost accounts all the accounts sacrificed" (p125-6).

One could take this as meaning that central planners have comprehensive data

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<sup>35</sup> His actual example is that of a Hungarian Count and Hungarian peasants. Refined nobility might well derive greater satisfaction from marginal income than uncultured peasants. Of course, one might ask how feudal classes pertain to a discussion of the merits of Capitalism.

<sup>36</sup> Socialism would eliminate systematic differences in 'sensitivity' between classes by eliminating classes.

on consumer values. However, this passage refers to the issue of social costs that entrepreneurs supposedly impose on workers<sup>37</sup>.

Further evidence of Lange's understanding of the nature of the problem at hand enters with his discussion of how Capitalism delivered unprecedented economic progress. Lange argues (1937 p 128-129) that economic progress derived from innovations that improve "a given combination of factors of production". To Lange entrepreneurs seek to gain profits and inflict losses upon their rivals by innovating. However, Lange argues "when business units become so large as to make the parametric function of prices *and the possibility of free entry of new firms (and investments)* into the industry ineffective, there arises a tendency to avoid devaluation of the capital invested" (1937 p129 emphasis added).

In this section, Lange appears to recognize the importance of profit and loss statements in, as Hayek latter put it, enabling us to discover new ways of doing things better than they have been done before<sup>38</sup>. As before, he has correctly identified the area of the problem- capital markets. He has also distinguished between the parametric function of prices and the dynamic features of markets pertaining to innovation and new investment- features that he relates to new entry to markets. This is very close to saying that progress derives from entrepreneurs discovering or being alert to new opportunities for profit- a point that Kirzner would latter emphasize. Competition leads to innovations, which

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<sup>37</sup> For example, Lange claims that market prices do not reflect occupational diseases and industrial accidents. "Much of this waste might be removed by proper legislation, taxes, and bounties, within the present economic system, but a socialist economy can do it with much greater thoroughness" (p126).

<sup>38</sup> See Hayek (1948 p 101) and also Hayek (1977)

somebody must notice the opportunity for if they are to be carried out. This contradicts Kirzner's claim that Lange was unaware that Socialist authorities would have to perform these entrepreneurial functions. Lange had some understanding of these functions, but tried to avoid having to explain how Socialist authorities would assume entrepreneurial functions by arguing that monopolistic entrepreneurs had ceased to perform this function anyway<sup>39</sup>.

Lange also referred specifically to the potential for bureaucratization of economic life under socialism and the bureaucratization of life under modern corporations. Lange mentions (pp 128-9 1937) that we must compare the efficiency of public officials to that of entrepreneurs. He goes on to note that this means comparing public officials "with corporation officials under capitalism", and he "does not see how the same, or even greater danger can be averted under capitalism"<sup>40</sup>.

Lange recognized the possibility for progress within competitive markets, but maintained that the concentration of private industry will hamper this progress. This indicates once again that he was arguing that Capitalism lacked its own rational basis concerning the dynamic issues. In this case, it is even clearer that Lange understood the dynamic nature of the problem at hand. He is not arguing

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<sup>39</sup> This passage also seems to anticipate the arguments of Schumpeter (1942) concerning a process of creative destruction. But he argues that the bias of large businesses towards the maintenance of capital over innovation is unsolvable within Capitalism because of the large size of modern businesses. These businesses subvert competition due to their financial control and also due to their political influence (Lange 1937 p131). Lange dismisses the notion that a regulatory state could reign in big business, because the economic power of the latter "would control the public planning authorities".

<sup>40</sup> Mises [1975(1944)] and Tullock (1964) addressed the issue of bureaucratization. Their arguments focus on monitoring agents rather than more fundamental problems with the pricing of capital goods.

that Socialism will deliver the dynamic economic progress of competitive Capitalism so much as he is arguing that the dynamism competitive Capitalism will give way to the lethargy of Monopoly Capitalism<sup>41</sup>. Once again, Lange asserts that Capitalism fails to deliver desirable results concerning capital- both in quantitative terms concerning accumulation and qualitative terms concerning innovation.

We can summarize the positions of Mises and Lange on calculation as follows. Mises claimed that profit and loss statements under capitalism are indispensable because total costs include, among other things, interest payments that reflect consumer time preferences. Lange admitted this, but countered by claiming that market interest rates do not reflect true time preferences either, due to the irrational nature of income distribution under capitalism. Having admitted to calculational chaos under Capitalism, Lange fell back on arguing for distributional chaos under Capitalism<sup>42</sup>. Lange relied on additional market failure arguments to make his case against capitalism. Lange understood Mises' challenge, conceded it fully by admitting to a diminution of consumer welfare, and argued only that Capitalism was at least bad in regards to capital accumulation, and worse in other respects.

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<sup>41</sup> Interestingly, he discusses Public Choice issues concerning regulatory capture more so than economies of scale. Lange recognized the problems with regulating private industry and saw the breaking of status quo political power as key to establishing Socialism. He did not seem to appreciate the extent to which Public Choice problems would still exist within highly centralized systems.

<sup>42</sup> Lerner (1936 p72-3) attempted to undo Lange's concession to Mises by arguing that the 'democratic governmental machinery' or an 'even more democratic market mechanism' might allow 'the consumer in a Socialist society to have much more influence on the rate of capital accumulation than in a Capitalist society'. This assertion obviously faces serious Public Choice problems.

## The Merits of The Distributional Critique

We can summarize the Interwar Debate and its aftermath as follows-

1. Mises asserted that the lack of property rights concerning capital implies inability on the part of economic planners to access data on how to invest in capital.
2. Socialists responded to Mises by admitting to their having ignored the issue of how carry out planning under socialism.
3. Early respondents insisted that they could use the Walrasian system of equations to match the conditions of competitive markets.
4. Hayek and Robbins exposed fundamental problems with this 'equations solving' approach.
5. Lange then retreated to a position that restated Mises' original claim concerning the relative demand for final goods, and admitted to the impossibility of an accounting for time preferences under Socialism, albeit for slightly different reasons. He then attempted to pull Capitalism down to the same level with his Distributional Critique of Capitalism, and claimed that market failures tipped the scale in favor of Socialism.
6. Individuals on both sides then wrongly focused on the trial and error part of Lange's argument. One side wrongly claimed victory, when Mises' original argument had been fully vindicated. They other overlooked this vindication and sought to further elucidate the issues of dynamic price adjustment and contextual knowledge. This advanced our understanding of how markets work, but did not address Lange's Distributional Critique of Capitalism. Some did focus on income distribution, though this was seen as separate from Lange's answer to Mises and Hayek<sup>43</sup>.

Lange was correct concerning the problem of accounting for time preference under Socialism. He clarified an aspect of the problem of Economic Calculation under Socialism. Absent saving credit markets central planners would determine capital accumulation and the income stream arbitrarily. Recreating this context

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<sup>43</sup> It is worth noting that Mises mentions income distribution when discussing Socialist beliefs, though it is far from clear that he is responding to Lange. Following the marginal distribution theory of income developed by JB Clark, he ties efficiency and market distribution together. By this time, however, most economists considered the debate to have ended. Heilbroner (1990) also gets at this issue, but treats distribution as pertaining to our 'vision of society' rather than as an efficiency issue..



would make private citizens de facto owners of capital and in so doing restore Capitalism.

Are Socialists also correct regarding capital markets and income distribution under Capitalism? Lange's own misgivings regarding private capital markets now seem overly pessimistic. Keynes' assertions that 'animal spirits' and 'the dark forces of time and uncertainty' plague capital markets carry far less weight with current professional opinion now than they did in Lange's day.

Lange also ignored the affects that income distribution has on allocation. His claim that historical factors (factor ownership) determine distribution independently of efficiency considerations ignores marginal distribution theory. The idea that income redistribution affects productivity is hardly an outlandish proposition<sup>44</sup>.

It is also clear that the picture Lange paints for income distribution under Capitalism is inaccurate. He claims that historical factors determine distribution independent of requirements for social welfare maximization. Who would now say that in the West some starve while others indulge in luxury? The existence of a large middle class in Western and Asian Capitalist nations is all too evident, as is the prevalence of starvation in centrally planned economies<sup>45</sup>.

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<sup>44</sup> Mises did address this issue, though not necessarily in response to Lange. See Human Action p

<sup>45</sup> See Becker, Jasper *Hungry Ghosts* Henry Holt and Company 1998, Conquest, Robert *The Harvest of Sorrow* Oxford Press 1987, Dolot, Miron and Ulam, Adam *Execution by Hunger, the Hidden Holocaust* WW Norton and Company 1987, Zeng, Yi *Scarlet Memorial: Tales of Murder and Cannibalism in Modern China* Westview Press 1998, and Rummel, RJ *Death by Government* Transaction Publishers 1997

Lange's Competitive Solution was not where he retreated from the earlier socialist position. It merely rephrased and expanded upon a point that Mises had already made concerning consumer goods. He conceded the challenge posed by Mises and Hayek by discussing capital accumulation under Socialism, and by accepting that it precludes economic calculation. His Distributional Critique of Capitalism then posed a challenge to Mises and Hayek- one they scarcely met<sup>46</sup>.

While scholars of this debate took Lange's Competitive Solution as his response to Mises, they overlooked the importance of the two problems he saw as requiring special attention. Lange was aware of many of the issues raised by Mises and Hayek. If anything, he was unaware that Mises had conceded that central planners could discern marginal rates of substitution for final goods. Critics of Lange are correct in arguing that he did retreat in his debate with Mises and Hayek. Their error is in underestimating the area and extent of this retreat, and the nature of his counterargument.

DW MacKenzie  
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<sup>46</sup> Mises did discuss distributional issues concerning Capitalism, but not in reference to Lange's Distributional Critique. He argued against the claim that one could separate distribution from production.

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