The End of Socialism and the Calculation Debate Revisited

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At the root of the dazzling revolutionary implosion and collapse of socialism and central planning in the "socialist bloc" is what everyone concedes to be a disastrous economic failure. The peoples and the intellectuals of Eastern Europe and the Soviet Union are crying out not only for free speech, democratic assembly, and *glasnost*, but also for private property and free markets. And yet, if I may be pardoned a moment of nostalgia, four-and a-half-decades ago, when I entered graduate school, the economics Establishment of that era was closing the book on what had been for two decades the famed "socialist calculation debate." And they had all decided, left, right, and center, that there was not a thing economically wrong with socialism: that socialism's only problems, such as they might be, were *political*. Economically, socialism could work just as well as capitalism.

Mises and the Challenge of Calculation

Before Ludwig von Mises raised the calculation problem in his celebrated article in 1920,[1] everyone, socialists and non-socialists alike, had long realized that socialism suffered from an *incentive problem*. If, for example, everyone under socialism were to receive an equal income, or, in another variant, everyone was supposed to produce "according to his ability" but receive "according to his needs," then, to sum it up in the famous question: Who, under socialism, will take out the garbage? That

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[1]Mises's article, published in 1920 in German, "Die Wirtschaftsrechnung im sozialistischen Gemeinwesen," was only made available in English in 1935: Mises, "Economic Calculation in the Socialist Commonwealth," in F. A. Hayek, ed., *Collectivist Economic Planning* (London: Routledge and Sons, 1935), pp. 87–130. The article was republished as a monograph by the Mises Institute with a notable postscript by Professor Joseph T. Salerno (Ludwig von Mises, *Economic Calculation in the Socialist Commonwealth* [Auburn, Ala.: Ludwig von Mises Institute, 1990]).

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is, what will be the incentive to do the grubby jobs, and, furthermore, to do them well? Or, to put it another way, what would be the incentive to work hard and be productive *at any job*?

The traditional socialist answer held that the socialist society would transform human nature, would purge it of selfishness, and remold it to create a New Socialist Man. That new man would be devoid of any selfish, or indeed any self-determined, goals; his only wish would be to work as hard and as eagerly as possible to achieve the goals and obey the orders of the socialist State. Throughout the history of socialism, socialist *ultras*, such as the early Lenin and Bukharin under "War Communism," and later Mao Tse-tung and Che Guevara, have sought to replace material by so-called "moral" incentives. This notion was properly and wittily ridiculed by Alexander Gray as "the idea that the world may find its driving force in a Birthday Honours List (giving to the King, if necessary, 165 birthdays a year)."[2] At any rate, the socialists soon found that voluntary methods could hardly yield them the New Socialist Man. But even the most determined and bloodthirsty methods could not avail to create this robotic New Socialist Man. And it is a testament to the spirit of freedom that cannot be extinguished in the human breast that the socialists continued to fail dismally, despite decades of systemic terror.

But the uniqueness and the crucial importance of Mises's challenge to socialism is that it was totally unrelated to the well-known incentive problem. Mises in effect said: All right, suppose that the socialists have been able to create a mighty army of citizens all eager to do the bidding of their masters, the socialist planners. What exactly would those planners tell this army to do? How would they know what products to order their eager slaves to produce, at what stage of production, how much of the product at each stage, what techniques or raw materials to use in that production and how much of each, and where specifically to locate all this production? How would they know their costs, or what process of production is or is not efficient?

Mises demonstrated that, in any economy more complex than the Crusoe or primitive family level, the socialist planning board would simply not know what to do, or how to answer any of these vital questions. Developing the momentous concept of *calculation*, Mises pointed out that the planning board could not answer these questions because socialism would lack the indispensable tool that private entrepreneurs use to appraise and calculate: the existence of a market in the means of production, a market that brings about money

[2]Alexander Gray, *The Socialist Tradition* (London: Longmans, Green, 1946), p. 90.

prices based on genuine profit-seeking exchanges by private owners of these means of production. Since the very essence of socialism is collective ownership of the means of production, the planning board would not be able to plan, or to make any sort of rational economic decisions. Its decisions would necessarily be completely arbitrary and chaotic, and therefore the existence of a socialist planned economy is literally "impossible" (to use a term long ridiculed by Mises's critics).

The Lange-Lerner "Solution"

In the course of intense discussion throughout the 1920s and 1930s, the socialist economists were honest enough to take Mises's criticism seriously, and to throw in the towel on most traditional socialist programs: in particular, the original communist vision that workers, not needing such institutions as bourgeois money fetishism, would simply produce and place their products on some vast socialist heap, with everyone simply taking from that heap "according to his needs." The socialist economists also abandoned the Marxian variant that everyone should be paid according to the labor time embodied into his product. In contrast, what came to be known as the Lange-Lerner solution (or, less commonly but more accurately, the Lange-Lerner-Taylor solution), acclaimed by virtually all economists, asserted that the socialist planning board could easily resolve the calculation problem by ordering its various managers to fix accounting prices. Then, according to the contribution of Professor Fred M. Taylor, the central planning board could find the proper prices in much the same way as the capitalist market: trial and error. Thus, given a stock of consumer goods, if the accounting prices are set too low, there will be a shortage, and the planners will raise prices until the shortage disappears and the market is cleared. If, on the other hand, prices are set too high, there will be a surplus on the shelves, and the planners will lower the price, until the markets are cleared. The solution is simplicity itself![3]

In the course of his two-part article and subsequent book, Lange concocted what could only be called the Mythology of the Socialist Calculation Debate, a mythology which, aided and abetted by Joseph Schumpeter, was accepted by virtually all economists of whatever ideological stripe. It was this mythology which I found handed down as

[3]Oskar Lange's well-known article was originally in two parts: "On the Economic Theory of Socialism," *Review of Economic Studies* 4 (October 1936): 53–71, and ibid. 5 (February 1937): 132–42; Fred M. Taylor's article was "The Guidance of Production in a Socialist State," *American Economic Review* 19 (March 1929); Taylor was reprinted and Lange revised and published in Oskar Lange and Fred M. Taylor, *On the Economic Theory of Socialism*, B. Lippincott, ed. (Minneapolis: University of Minnesota Press, 1938).

the Orthodox Line when I entered Columbia University's graduate school at the end of World War II—a line promulgated in lectures by no less an expert on the Soviet economy than Professor Abram Bergson, then at Columbia. In 1948, indeed, Professor Bergson was selected to hand down the Received Opinion on the subject by a committee of the American Economic Association, and Bergson interred the socialist calculation question with the Orthodox Line as its burial rite.[4]

The Lange-Bergson Orthodox Line went about as follows: Mises, in 1920, had done an inestimable service to socialism by raising the problem of economic calculation, a problem of which socialists had not generally been aware. Then Pareto and his Italian disciple Enrico Barone had shown that Mises's charge, that socialist calculation was impossible, was incorrect, since the requisite number of supply, demand, and price equations existed under socialism as under a capitalist system. At that point, F. A. Hayek and Lionel Robbins, abandoning Mises's extreme position, fell back on a second line of defense: that, while the calculation problem could be solved *theoretically*, in practice it would be too difficult. Thereby Hayek and Robbins fell back on a practical problem, or one of degree of efficiency rather than of a drastic difference in kind. But now, happily, the day has been saved for socialism, since Taylor-Lange-Lerner have shown that, by jettisoning utopian ideas of a money-less or price-less socialism, or of pricing according to a labor theory of value, the socialist Planning Board can solve these pesky equations simply by the good old capitalist method of trial and error.[5]

Bergson, attempting to be magisterial in his view of the debate, summed up Mises as contending that "without private ownership of, or (what comes to the same thing for Mises) a free market for the means of production, the rational evaluation of these goods for the purposes of calculating costs is ruled out . . ." Bergson correctly adds that to put Mises's point

> somewhat more sharply than is customary, let us imagine a Board of Supermen, with unlimited logical faculties, with a complete scale of values for the different consumers goods', and present and future consumption, and detailed knowledge of production techniques. Even such a Board would be unable to evaluate rationally the means of production. In the absence of a free market for these goods, decisions

[4]Abram Bergson, "Socialist Economics," in H. S. Ellis, ed., *A Survey of Contemporary Economics* (Philadelphia: Blakiston, 1948), pp. 412–48.

[5]Lange was aided in this construction by being able to use Hayek's collection of articles on the subject, which had just been published the year before his first article, as a useful foil. Hayek's volume included the seminal article by Mises, other contributions by Pierson and Halm, two articles by Hayek himself, and the alleged refutation of Mises by Barone. See Hayek, *Collectivist Economic Planning*.

on resource allocation in Mises' view necessarily would be on a haphazard basis.

Bergson sharply comments that this "argument is easily disposed of." Lange and Schumpeter both point out that, as Pareto and Barone had shown,

> once tastes and techniques are given, the values of the means of production can be determined unambiguously by imputation without the intervention of a market process. The Board of Supermen could decide readily how to allocate resources so as to assure the optimum welfare. It would simply have to solve the equations of Pareto and Barone.[6]

So much for Mises. As for the Hayek-Robbins problem of practicality, Bergson adds, that can be settled by the Lange-Taylor trial-and-error method; any remaining problems are only a matter of degree of efficiency, and political choices. The Mises problem has been satisfactorily solved.

Some Fallacies of the Lange-Lerner Solution

The breathtaking naivete of the Orthodox Line should have been evident even in the 1940s. As Hayek later chided Schumpeter on the assumption of "imputation" outside the market, this formulation "presumably means . . . that the valuation of the factors of production is implied in, or follows necessarily from, the valuation of consumers' goods. But . . . implication is a logical relationship which can be meaningfully asserted only of propositions simultaneously present to one and the same mind."[7]

Economists were convinced of the Lange solution because they had already come under the sway of the Walrasian general equilibrium model; Schumpeter, for example, was an ardent Walrasian. In this model, the economy is always in static general equilibrium, a changeless world in which all "data"—tastes or value scales, alternative technologies, and lists of resources—are known to everyone, and where costs are known and always equal to price. The Walrasian world is also one of "perfect" competition, where prices are given to all managers. Indeed, both Taylor and Lange make the point that the Socialist Planning Board will be better able to calculate than capitalist markets, since the socialist planners can ensure "perfect competition," whereas the real world of capitalism is shot through with various sorts of "monopolies"! The socialist planners can act like the

[6]Bergson, "Socialist Economics," p. 446.

[7]F. A. Hayek, "The Use of Knowledge in Society" (1945), in Hayek, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), p. 90.

absurdly fictional Walrasian "auctioneer," bringing about equilibrium rapidly by trial and error.

Set aside the obvious absurdity of trusting a coercive governmental monopoly to act somehow as if it were in "perfect competition" with parts of itself. Another grievous flaw in the Lange model is thinking that general equilibrium, a world of certainty where there is no room for the driving force of entrepreneurship, can somehow be used to depict the real world. The actual world is one not of changeless "givens" but of incessant change and systemic uncertainty. Because of this uncertainty, the capitalist entrepreneur, who stakes assets and resources in attempting to achieve profits and avoid losses, becomes the crucial actor in the economic system, an actor who can in no way be portrayed by a world of general equilibrium. Furthermore, it is ludicrous, as Hayek pointed out, to think of general equilibrium as the only legitimate "theory," with all other areas or problems dismissed as mere matters of practicality and degree. No economic theory worth its salt can be worthwhile if it omits the role of the entrepreneur in an uncertain world. The Pareto-Barone-Lange, etc. "equations" is not simply excellent theory that faces problems in practice; for in order to be "good," a theory must be useful in explaining real life.[8]

Another grave flaw in the Lange-Taylor trial-and-error approach is that it concentrates on consumer good pricing. It is true that retailers, given the stock of a certain type of good, can clear the market by adjusting the prices of that good upward or downward. But, as Mises pointed out in his original 1920 article, consumers goods are not the real problem. Consumers, these "market socialists" are postulating, are free to express their values by using money they had earned on a range of consumers' goods. Even the labor market—at least in principle[9]—can be treated as a market with self-owning suppliers who are free to accept or reject bids for their labor and to move to different occupations. The real problem, as Mises has insisted from the beginning, is in all the intermediate markets for land and capital goods. Producers have to use land and capital resources to

[8]The silliness of hailing Barone's essay as a refutation of Mises is highlighted by the fact that Barone's article was published in 1908, twelve years before Mises's article which it is supposed to have refuted. The date was well known to, and made no impression upon, Ludwig von Mises. Moreover, Barone and Pareto themselves had only scorn for any notion that their equations could aid socialist planning. See Trygve J. B. Hoff, *Economic Calculation in the Socialist Society* (1949; Indianapolis, Ind.: Liberty Press, 1981), pp. 222–23.

[9]Here, as in other parts of his argument—as we shall see further below—Mises is leaning over backward to concede the market socialists their best case, and is not considering whether such free consumer or labor markets are really likely in a world where the state is the only seller, as well as the only purchaser, of labor.

decide what the stocks of the various consumer goods should be. Here there are a huge number of markets where the State monopoly can only be both buyer and seller for each transaction, and these intra-monopoly, intra-state transactions permeate the most vital markets of an advanced economy—the complex lattice-work of the capital markets. And here is precisely where calculational chaos necessarily reigns, and there is no way for rationality to intrude on the immense number of decisions on the allocation of prices and factors of production in the structure of capital goods.

Mises's Rebuttal: The Entrepreneur

Moreover, Mises's brilliant and devastating rebuttal to his Lange-Lerner "market socialism" critics has virtually never been considered—neither by the economics establishment nor by the post-World War II Hayekians. In both cases, the writers were eager to dispose of Mises as having safely made his pioneering contribution in 1920, but being superseded later, either by Lange-Lerner or by Hayek, as the case may be. In both cases, it was inconvenient to ponder that Mises continued to elaborate his position with a penetrating critique of his critics, or that Mises's "extreme" formulation may, after all, have been correct.[10]

Mises began his rebuttal in *Human Action* by discussing the "trial-and-error" method, and pointing out that this process only works in the capitalist market. There the entrepreneurs are strongly motivated to make greater profits and to avoid losses, and further, such a criterion does not apply to the capital goods or land market under socialism where all resources are controlled by one entity, the government.

Continuing his reply, Mises pressed on to a brilliant critique, not only of socialism, but of the entire Walrasian general equilibrium model. The major fallacy of the "market socialists," Mises pointed out, is that they look at the economic problem from the point of view of

[10]Mises's later rebuttal is in his *Human Action* (New Haven: Yale University Press, 1949), pp. 694–711. For the establishment, the debate was supposed to be over by 1938. For an example of a Hayekian survey of the debate that does not bother to so much as mention *Human Action*, see Karen I. Vaughn, "Introduction," in Hoff, *Economic Calculation*, pp. ix–xxxvii. Indeed, in an earlier paper, Vaughn had sneered that "Mises' so-called final refutation in *Human Action* is mostly polemic and glosses over the real problems . . ." Vaughn, "Critical Discussion of the Four Papers," in Lawrence Moss, ed. *The Economics of Ludwig von Mises* (Kansas City: Sheed and Ward, 1976), p. 107. The Hayekian doctrine will be treated further below.

For a refreshing example of an outstanding Misesian contribution to the debate that does not neglect or deprecate *Human Action* but rather builds upon it, see Joseph T. Salerno, "Ludwig von Mises as Social Rationalist," *Review of Austrian Economics* 4 (1990): 36–48. Also see Salerno, "Why Socialist Economy is *Impossible*," a Postscript to Mises, *Economic Calculation in the Socialist Commonwealth* (Auburn, Ala.: Ludwig von Mises Institute, 1990).

the manager of the individual firm, who seeks to make profits or avoid losses within a rigid framework of a given, external allocation of capital to each of the various branches of industry and indeed to the firm itself. In other words, the "market socialist" manager is akin, not to the real driving force of the capitalist market, the capitalist entrepreneur, but rather to the relatively economically insignificant manager of the corporate firm under capitalism. As Mises brilliantly puts it:

> the cardinal fallacy implied in [market socialist] proposals is that they look at the economic problem from the perspective of the subaltern clerk whose intellectual horizon does not extend beyond subordinate tasks. They consider the structure of industrial production and the allocation of capital to the various branches and production aggregates as rigid, and do not take into account the necessity of altering this structure in order to adjust it to changes in conditions. . . . They fail to realize that the operations of the corporate officers consist merely in the loyal execution of the tasks entrusted to them by their bosses, the shareholders. . . . The operations of the managers, their buying and selling, are only a small segment of the totality of market operations. The market of the capitalist society also performs those operations which allocate the capital goods to the various branches of industry. The entrepreneurs and capitalists establish corporations and other firms, enlarge or reduce their size, dissolve them or merge them with other enterprises; they buy and sell the shares and bonds of already existing and of new corporations; they grant, withdraw, and recover credits; in short they perform all those acts the totality of which is called the capital and money market. It is these financial transactions of promoters and speculators that direct production into those channels in which it satisfies the most urgent wants of the consumers in the best possible way.[11]

Mises goes on to remind the reader that the corporate manager performs only a "managerial function," a subsidiary service that "can never become a substitute for the entrepreneurial function." Who are the capitalist-entrepreneurs? They are "the speculators, promoters, investors and moneylenders, [who] in determining the structure of the stock and commodity exchanges and of the money market, circumscribe the orbit within which definite tasks can be entrusted to the manager's discretion." The crucial question, Mises continues, is not managerial activities, but: "In which branches should production be increased or restricted, in which branches should the objective of production be altered, what new branches should be inaugurated?" In short, the crucial decisions in the capitalist economy are the allocation of capital to firms and industries. "With regard to these issues," Mises

[11]Mises, *Human Action*, pp. 703–04.

adds, "it is vain to cite the honest corporation manager and his well-tried efficiency. Those who confuse entrepreneurship and management close their eyes to the economic problem . . . The capitalist system is not a managerial system; it is an entrepreneurial system."

But here, Mises triumphantly concludes, no "market socialist" has ever suggested preserving or carrying over, much less understood the importance of, the specifically entrepreneurial functions of capitalism:

> Nobody has ever suggested that the socialist commonwealth could invite the promoters and speculators to continue their speculations and then deliver their profits to the common chest. Those suggesting a quasi-market for the socialist system have never wanted to preserve the stock and commodity exchanges, the trading in futures, and the bankers and money-lenders as quasi-institutions.[12]

Mises has been cited as stating, in *Human Action*, that it is absurd for the socialist planning board to tell their managers to "play market," to act *as if* they are owners of their firms in trying to maximize profits and avoid losses. But it is important to stress that Mises was focusing, not so much on the individual managers of socialist "firms," but on the speculators and investors who decide the crucial allocations of capital throughout the structure of industry. It is at least conceivable that one can order a manager to play market and act as if he were enjoying the profits and suffering losses; but it is clearly ludicrous to ask investors and capital speculators to act as if their fortunes were at stake. As Mises adds:

> one cannot *play* speculation and investment. The speculators and investors expose their own wealth, their own destiny. This fact makes them responsible to the consumers, the ultimate bosses of the capitalist economy. If one relieves them of this responsibility, one deprives them of their very character.[13]

One time, during Mises's seminar at New York University, I asked him whether, considering the broad spectrum of economies from a purely free market economy to pure totalitarianism, he could single out one criterion according to which he could say that an economy was essentially "socialist" or whether it was a market economy. Somewhat to my surprise, he replied readily: "Yes, the key is whether the economy has a stock market." That is, if the economy has a full-scale market in titles to land and capital goods. In short: Is the allocation of capital basically determined by government or by private owners? At the time, I did not fully understand the vital importance

[12]Ibid., pp. 704–05.
[13]Ibid., p. 705.

of Mises's answer, which I realized recently when poring over the great merits of the Misesian, as compared to the Hayekian, analysis of the socialist calculation problem.

For Mises, in short, the key to the capitalist market economy and its successful functioning is the entrepreneurial forecasting and decisionmaking of private owners and investors. The key is emphatically *not* the more minor decisions made by corporate managers within a framework already set by entrepreneurs and the capital markets. And it is obvious that Lange, Lerner, and the other market socialists merely envisioned the relatively lesser managerial decisions. These economists, who had never grasped the function of speculation or capital markets, therefore had no idea that they would need to be or could be replicated in a socialist system.[14] And this is not surprising, since in the Walrasian general micro-equilibrium model, there is no capital structure, there is no role for capital, and capital theory has become totally submerged into "growth theory," that is, growth of a homogeneous "level," or blob, of aggregate macro-capital. The allocation of capital is considered external and given, and receives no consideration.

The Structure of Capital

Joseph Schumpeter and Frank H. Knight are interesting examples of two eminent economists who were personally anti-socialist but were seduced by their Walrasian devotion to general equilibrium and their lack of a genuine capital theory into strongly endorsing the orthodox view that there is no economic calculation problem under socialism. In particular, in capital theory, both Schumpeter and Knight were disciples of J. B. Clark, who denied any role at all for time in the process of production. For Schumpeter, production takes no time because production and consumption are somehow always "synchronized." Time is erased from the picture, even to assuming away the existence of any accumulated stocks of capital goods, and therefore of any age structure of such goods. Since production is magically synchronized, there is then no necessity for land or labor to receive advances in payment from capitalists out of accumulated savings. Schumpeter achieves this feat by sundering capital completely from its embodiment in capital goods, and limiting the concept to a money fund used to purchase such goods.[15]

Frank Knight, the doyen of the Chicago School, was also an ardent

[14]The fact that some socialist bloc countries, such as Hungary, now permit a stock market, albeit small and truncated, and that other ex-communist countries are seriously considering introducing such capital markets, demonstrates the enormous importance of the de-socialization now under way in Eastern Europe.

[15]See Murray N. Rothbard, "Breaking Out of the Walrasian Box: The Cases of Schumpeter and Hansen," *Review of Austrian Economics* 1 (1987): 98–100, 107.

believer in the Clarkian view that time preference has no influence on interest paid by producers, and that production is synchronized so that time plays no role in the production structure. Hence, Knight believed, along with modern orthodoxy, that capital is a homogeneous, self-perpetuating blob that *has no* lattice-like, time-oriented structure. Knight's fiercely anti-Böhm-Bawerkian, anti-Austrian views on capital and interest led him to a then-famous war of journal articles over capital theory during the 1930s, a war he won by default when Austrianism disappeared because of the Keynesian Revolution.[16]

In his negative review of Mises's *Socialism*, Frank Knight, after hailing Lange's "excellent" 1936 article, brusquely dismisses the socialist calculation debate as "largely sound and fury." To Knight, it is simply "truistical" that the "technical basis of economic life" would continue as before under socialism, and that therefore "the managers of various technical units in production—farms, factories, railways, stores, etc.—would carry on in essentially the same way." Note, there is no reference whatever to the crucial capital market, or to the allocation of capital to various branches of production. If capital is an automatically renewing homogeneous blob, all one need worry about is growth in the amount of that blob. Hence, Knight concludes that "socialism is a political problem, to be discussed in terms of social and political psychology, and economic theory has relatively little to say about it."[17] Certainly, that is true of Knight's orthodox-Chicagoite brand of economic theory!

It is instructive to compare the naivete and the brusque dismissal

[16]On Knight vs. Hayek, Machlup, and Boulding in the 1930s, see F. A. Hayek, "The Mythology of Capital," in W. Fellner and B. Haley, eds., *Readings in the Theory of Income Distribution* (Philadelphia: Blakiston, 1946), pp. 355–83. For a Knightian attack on the Austrian discounted marginal productivity theory on behalf of what is now the orthodox undiscounted (by time-preference) marginal productivity theory, see Earl Rolph, "The Discounted Marginal Productivity Doctrine," ibid., pp. 278–93. For an Austrian rebuttal, see Murray N. Rothbard, *Man, Economy, and State*, vol. 1 (Los Angeles: Nash, 1970), pp. 431–33; and Walter Block, "The DMVP-MVP Controversy: A Note," *Review of Austrian Economics* 4 (1990): 199–207.

[17]Frank H. Knight, "Review of Ludwig von Mises, *Socialism*," *Journal of Political Economy* 46 (April 1938): 267–68. In another review in the same issue of the journal, Knight claims that there *would* be a "capital market" under socialism, but it is clear that he is referring only to a market for loans, and not to a genuine market in equities throughout the production structure. Here again, Mises has a devastating critique of this sort of scheme in *Human Action*, pointing out that managers bidding for governmental planning board funds would not be bidding for or staking their own property, and hence they would "not be restrained by any financial dangers they themselves run in promising too high a rate of interest for the funds borrowed. . . . All the hazards of this insecurity fall only upon society, the exclusive owner of all resources available. If the director were without hesitation to allocate the funds available to those who bid most, he would simply . . . abdicate in favor of the least scrupulous visionaries and scoundrels." See Knight, "Two Economists on Socialism," *Journal of Political Economy* 46 (April 1938): 248; and Mises, *Human Action*, p. 705.

of the problem by Schumpeter and Knight with the penetrating Misesian critique of socialism by Professor Georg Halm:

> Because capital is no longer owned by many private persons, but by the community, which itself disposes of it directly, a rate of interest *can* no longer be determined. A pricing process is always possible only when demand and supply meet in a market. . . . In the socialist economy . . . there can be no demand and no supply when the capital from the outset is in the possession of its intending user, in this case the socialistic central authority.
>
> Now it might perhaps be suggested that, since the rate of interest cannot be determined automatically, it should be fixed by the central authority. But this likewise would be quite impossible. It is true that the central authority would know quite well how many capital goods of a given kind it possessed or could procure . . .; it would know the capacity of the existing plant in the various branches of production; *but it would not know how scarce capital was*. For the scarcity of means of production must always be related to the demand for them, whose fluctuations give rise to variations in the value of the good in question . . .
>
> If it should be objected that a price for consumption-goods would be established, and that in consequence the intensity of the demand and so the value of the means of production would be determinate, this would be a further serious mistake. . . . The demand for means of production, labor and capital goods, is only indirect.

Halm goes on to add that if there were only one single factor of production in making consumers' goods, the socialist "market" might be able to determine its proper price. But this can not be true in the real world where *several* factors of production take part in the production of goods in various markets.

Halm then adds that the central authority, contrary to his above concession, would not *even* be able to find out how much capital it is employing. For capital goods are heterogeneous, and therefore how "can the total plant of one factory be compared with that of another? How can a comparison be made between the values of even only two capital-goods?" In short, while under capitalism such comparisons can be made by means of money prices set on the market for every good, in the socialist economy the absence of genuine money prices arising out of a market precludes any such value comparisons. Hence, there is also no way for a socialist system to rationally estimate the costs (which are dependent on prices in factor markets) of any process of production.[18]

[18]Georg Halm, "Further Considerations on the Possibility of Adequate Calculation in a Socialist Community," in Hayek, *Collectivist Economic Planning*, pp. 162–65. Also see ibid., pp. 13–200.

Mises's Rebuttal: Valuation and Monetary Appraisement

In his original 1920 article, Mises emphasized that "as soon as one gives up the conception of a freely established monetary price for goods of a higher order, rational production becomes completely impossible." Mises then states, prophetically:

> One may anticipate the nature of the future socialist society. There will be hundreds and thousands of factories in operation. Very few of these will be producing wares ready for use; in the majority of cases what will be manufactured will be unfinished goods and production goods. All these concerns will be interrelated. Every good will go through a whole series of stages before it is ready for use. In the ceaseless toil and moil of this process, however, the administration will be without any means of testing their bearings. It will never be able to determine whether a given good has not been kept for a superfluous length of time in the necessary processes of production, or whether work and material have not been wasted in its completion. How will it be able to decide whether this or that method of production is the more profitable? At best it will only be able to compare the quality and quantity of the consumable end-product produced, but will in the rarest cases be in a position to compare the expenses entailed in production.

Mises points out that while the government may be able to know what ends it is trying to achieve, and what goods are most urgently needed, it will have no way of knowing the other crucial element required for rational economic calculation: valuation of the various means of production, which the capitalist market can achieve by the determination of money prices for all products and their factors.[19]

Mises concludes that, in the socialist economy "in place of the economy of the 'anarchic' method of production, recourse will be had to the senseless output of an absurd apparatus. The wheels will turn, but will run to no effect."[20]

Moreover, in his later rebuttal to the champions of the Pareto-Barone equations, Mises points out that the crucial problem is not simply that the economy is not and can never be in the general equilibrium state described by these differential equations. In addition to other grave problems with the equilibrium model (e.g.: that the socialist planners do not now know their value scales in future

[19]Mises, "Economic Calculation in the Socialist Commonwealth," pp. 106–08.

[20]Ibid., p. 106. This conclusion of 1920 is strikingly close to the quip common in the Poland of 1989, as reported by Professor Krzyztof Ostazewski of the University of Louisville: that the socialist planned economy is "a value-shredding machine run by an imbecile."

equilibrium; that money and monetary exchange cannot fit into the model; that units of productive factors are neither perfectly divisible nor infinitesimal—and that marginal utilities of different people cannot be equated—on the market or anywhere else), the equations "do not provide any information about the human actions by means of which the hypothetical state of equilibrium" has been or can be reached. In short, the equations offer no information whatever on how to get from the existing disequilibrium state to the general equilibrium goal.

In particular, Mises points out, "even if, for the sake of argument, we assume that a miraculous inspiration has enabled the director without economic calculation to solve all problems concerning the most advantageous arrangement of all production activities and that the price image of the final goal he must aim at is present to his mind," there remain crucial problems on the path from here to there. For the socialist planner does not start from scratch and then build a capital goods structure most perfectly designed to meet his goals. He necessarily starts with a capital goods structure produced at many stages of the past and determined by past consumer values and past technological methods of production. There are different degrees of such past determinants built into the existing capital structure, and anyone starting today must use these resources as best he can to meet present and expected future goals. For these heterogeneous choices, no mathematical equations can be of the slightest use.[21]

Finally, the unique root of Mises's position, and one that distinguishes him and his "socialist impossibility" thesis from Hayek and the Hayekians, has been neglected until the present day. And this neglect has persisted despite Mises's own explicit avowal in his memoirs of the root and groundwork of his calculation thesis.[22] For Mises was *not*, like Hayek and his followers, concentrating on the flaws in the general equilibrium model when he arrived at his position; nor was he led to his discussion solely by the triumph of the socialist revolution in the Soviet Union. For Mises records that his position on socialist calculation emerged out of his first great work,

[21]Mises, *Human Action*, pp. 706–09. As Mises puts it: "socialists of all shades of opinion, repeat again and again that what makes the achievement of their ambitious plans realizable is the enormous wealth hitherto accumulated. But in the same breath they disregard the fact that this wealth consists to a great extent in capital goods produced in the past and more or less antiquated from the point of view of our present valuations and technological knowledge." Ibid., p. 710.

[22]In Mises's *Notes and Recollections* (Spring Mills, Penn.: Libertarian Press, 1978), p. 112. Also see the discussion in Murray N. Rothbard, *Ludwig von Mises: Scholar, Creator, Hero* (Auburn, Ala.: Ludwig von Mises Institute, 1988), pp. 35–38.

The Theory of Money and Credit (1912). In the course of that notable integration of monetary theory and "micro" marginal utility theory, Mises was one of the very first to realize that subjective valuations of the consumers (and of laborers) on the market are purely ordinal, and are in no way measurable. But market prices are cardinal and measurable in terms of money, and market money prices bring goods into cardinal comparability and calculation (e.g., a $10 hat is "worth" five times as much as a $2 loaf of bread).[23] But Mises realized that this insight meant it was absurd to say (as Schumpeter would) that the market "imputes" the values of consumer goods back to the factors of production. Values are not directly "imputed"; the imputation process works only indirectly, by means of money prices on the market. Therefore socialism, necessarily devoid of a market in land and capital goods, must lack the ability to calculate and compare goods and services, and therefore any rational allocation of productive resources under socialism is indeed *impossible.*[24]

For Mises, then, his work on socialist calculation was part and parcel of his expanded integration of direct and monetary exchange, of "micro" and "macro," that he had begun but not yet completed in *The Theory of Money and Credit.*[25]

Fallacies of Hayek and Kirzner

The orthodox line of the 1930s and 40s was wrong in claiming that Hayek and his followers (such as Lionel Robbins) abandoned Mises's "theoretical" approach by bowing down to the Pareto-Barone equations, falling back on "practical" objections to socialist planning.[26] As we have already seen, Hayek scarcely ceded to mathematical equations of general equilibrium the monopoly of correct economic theory. But it is also true that Hayek and his followers fatally and radically changed the entire focus of their "Austrian" position, either by mis-

[23]On the market, then, consumers *evaluate* goods and services ordinally, whereas entrepreneurs *appraise* (estimate and forecast future prices) cardinally. On valuation and appraisement, see Mises, *Human Action*, pp. 327–330; Salerno, "Mises as Social Rationalist," pp. 39–49; and Salerno, "Socialist Economy is *Impossible.*"

[24]Mises says in his memoirs: "They [the socialists] failed to see the very first challenge: How can economic action that always consists of preferring and setting aside, that is, of making unequal valuations, be transformed into equal valuations, by the use of equations? Thus the advocates of socialism came up with the absurd recommendation of substituting equations of mathematical catallactics, depicting an image from which human action is eliminated, for the monetary calculation in the market economy." Mises, *Notes and Recollections*, p. 112.

[25]This integration was later completed by his business-cycle theory in the 1920s, and then in his monumental treatise *Human Action*.

[26]Except for the unfortunate emphasis of Hayek and Robbins on the alleged socialist difficulty of computing or "counting" the equations. See below.

construing Mises's argument or by consciously though silently shifting the crucial terms of the debate.

It is no accident, in short, that Hayek and the Hayekians dropped Mises's term "impossible" as embarrassingly extreme and imprecise. For Hayek, the major problem for the socialist planning board is its lack of *knowledge*. Without a market, the socialist planning board has no means of knowing the value-scales of the consumers, or the supply of resources or available technologies. The capitalist economy is, for Hayek, a valuable means of disseminating knowledge from one individual to another through the pricing "signals" of the free market. A static, general equilibrium economy would be able to overcome the Hayekian problem of dispersed knowledge, since eventually all data would come to be known by all, but the everchanging, uncertain data of the real world prevents the socialist planning board from acquiring such knowledge. Hence, as is usual for Hayek, the argument for the free economy and against statism rests on an argument from ignorance.

But to Mises the central problem is not "knowledge." He explicitly points out that *even if* the socialist planners knew perfectly, and eagerly wished to satisfy, the value priorities of the consumers, and *even if* the planners enjoyed a perfect knowledge of all resources and all technologies, they *still* would not be able to calculate, for lack of a price system of the means of production. The problem is not knowledge, then, but calculability. As Professor Salerno points out, the *knowledge* conveyed by present—or immediate "past"—prices is consumer valuations, technologies, supplies, etc. of the immediate or recent past. But what acting man is interested in, in committing resources into production and sale, is *future* prices, and the present committing of resources is accomplished by the entrepreneur, whose function is to *appraise*—to anticipate—future prices, and to allocate resources accordingly. It is precisely this central and vital role of the *appraising entrepreneur*, driven by the quest for profits and the avoidance of losses, that cannot be fulfilled by the socialist planning board, for lack of a market in the means of production. Without such a market, there are no genuine money prices and therefore no means for the entrepreneur to calculate and appraise in cardinal monetary terms.

More philosophically, the entire Hayekian emphasis on "knowledge" is misplaced and misconceived. The purpose of human action is not to "know" but to employ means to satisfy goals. As Salerno perceptively summarizes Mises's position:

> The price system is not—and praxeologically cannot be—a mechanism for economizing and communicating the knowledge relevant to production plans [the Hayekian position]. The realized prices of history are an accessory of appraisement, the mental operation in

> which the faculty of understanding is used to assess the quantitative structure of price relationships which corresponds to an anticipated constellation of economic data. Nor are anticipated future prices tools of knowledge; they are instruments of economic calculation. And economic calculation itself is not the means of acquiring knowledge, but the very prerequisite of rational action within the setting of the social division of labor. It provides individuals, whatever their endowment of knowledge, the indispensable tool for attaining a mental grasp and comparison of the means and ends of social action.[27]

In a recent article, Professor Israel Kirzner argues for the Hayekian position. For Hayek and for Kirzner, the market is a "discovery procedure," that is, an unfolding of knowledge. There is, in this view of the market and of the world, no genuine recognition of the entrepreneur, not as a "discoverer," but as a dynamic risk taker, risking losses if his appraisal and forecast go awry. Kirzner's commitment to the "discovery process" fits all too well with his own original concept of the entrepreneurial function as being that of "alertness," and of different entrepreneurs as being variously alert to the opportunities that they see and discover. But this outlook totally misconceives the role of the entrepreneur. The entrepreneur is not simply "alert"; he forecasts; he appraises; he meets and bears risk and uncertainty by questing for profits and risking losses. As Salerno points out, for all their talk of dynamism and uncertainty, the Hayek-Kirzner "entrepreneur" is curiously bloodless and passive, receiving and passively imbibing knowledge imparted to him by the market. The Hayek-Kirzner entrepreneur is far closer than they like to think to the Walrasian automaton, to the fictional "auctioneer" who avoid all real trades in the marketplace.[28]

Unfortunately, while lucidly expounding the Hayekian position, Kirzner obfuscates the history of the debate by claiming that the later Mises, along with Hayek, changed his position (or, at the least, "elaborated" it) from his original, "static" view of 1920. But on the contrary, as Salerno points out, the "later" Mises explicitly spurned

[27]Salerno, "Mises as Social Rationalist," p. 44.

[28]Israel M. Kirzner, "The Economic Calculation Debate: Lessons for Austrians," *Review of Austrian Economics* 2 (1988): 1–18. Hayek coined the term "discovery procedure" in F. A. Hayek, "Competition as a Discovery Procedure," in *New Studies in Philosophy, Politics, Economics and the History of Ideas* (Chicago: University of Chicago Press, 1978), pp. 179–90. For a critique of Kirzner's concept of entrepreneurship, see Murray N. Rothbard, "Professor Hébert on Entrepreneurship," *Journal of Libertarian Studies* 7 (Fall 1985): 281–85. For Hayek's own contributions to the socialist calculation debate after Lange-Lerner, see F. A. Hayek, "Socialist Calculation III: The Competitive 'Solution'" (1940), and "The Use of Knowledge in Society," (1945), in *Individualism and Economic Order*, pp. 181–208; 77–91.

uncertainty of the future as the key to the calculation problem. The key to the calculation question, stated Mises in *Human Action*, is *not* that "all human action points to the future and the future is always uncertain." No, socialism has

> quite a different problem. Today we calculate from the point of view of our present knowledge and of our present anticipation of future conditions. We do not deal with the problem of whether or not the [socialist] director will be able to anticipate future conditions. What we have in mind is that the director cannot calculate from the point of view of his own present value judgments and his own present anticipation of future conditions, whatever they may be. If he invests today in the canning industry, it may happen that a change in consumers' tastes or in the hygienic opinions concerning the wholesomeness of canned food will one day turn his investment into a malinvestment. But how can he find out today how to build and equip a cannery most economically?
>
> Some railroad lines constructed at the turn of the century would not have been built if the people had at that time anticipated the impending advance of motoring and aviation. But those who at the time built railroads knew which of the various possible alternatives for the realization of their plans they had to choose from the point of view of their appraisements and anticipations and of the market prices of their day in which the valuations of the consumers were reflected. It is precisely this insight that the director will lack. He will be like a sailor on the high seas unfamiliar with the methods of navigation . . .[29,30]

Solving Equations and Lange's Last Word

One of the unfortunate formulations of Hayek and the Hayekians in the 1930s, giving rise to the general misunderstanding that the only problems of socialist planning are "practical" not "theoretical," was their stress on the alleged difficulty of socialist planners in computing or solving all the demand and supply functions, all the "simultaneous differential equations" needed to plan prices and the allocation of resources. If socialistic planning is to rely on the Pareto-Barone equations, then how will all of them be known, especially in a world of necessarily changing data of values, resources, and technology?

Lionel Robbins began this equation-difficulty approach in his

[29] Mises, *Human Action*, p. 696. Also see Salerno, "Mises as Social Rationalist," pp. 46–47ff.

[30] Kirzner apparently believes that Mises's concentration on entrepreneurship in his *Human Action* discussion of socialism demonstrates that Mises had gone over to the Hayek position. Kirzner seems to overlook the vast difference between Mises's forecasting and appraisement view of entrepreneurship and his own "alertness" doctrine, which totally leaves out the possibility of entrepreneurial loss.

study of the 1929 depression, *The Great Depression*. Conceding, with Mises, that the planners could determine consumer preferences by allowing a market in consumer goods, Robbins correctly added that the socialist planners would also have to "know the relative efficiencies of the factors of production in producing all the possible alternatives." Robbins then unfortunately added:

> On paper we can conceive this problem to be solved by a series of mathematical calculations. We can imagine tables to be drawn up expressing the consumers' demands . . . And we can conceive technical information giving us the productivity . . . which could be produced by each of the various possible combinations of the factors of production. On such a basis a system of simultaneous equations could be constructed whose solution would show the equilibrium distribution of factors and the equilibrium production of commodities.
>
> But in practice this solution is quite unworkable. It would necessitate the drawing up of millions of equations on the basis of millions of statistical tables based on many more millions of individual computations. By the time the equations were solved, the information on which they were based would have become obsolete and they would need to be calculated anew.[31]

While Robbins's strictures about changes in data were and still are true enough, they helped divert the emphasis from Mises's even-if-static and full-knowledge calculation approach, to Hayek's emphasis on uncertainty and change. More important, they gave rise to the general myth that Robbins's strictures against socialism, unlike Mises's, were only "practical" in the sense of not being able to calculate all these simultaneous equations. Furthermore, in the concluding essay in his *Collectivist Economic Planning*, Hayek set forth all the reasons why the planners could not know essential data, one of which is that they would have to solve "hundreds of thousands" of unknowns. But

> this means that, at each successive moment, every one of the decisions would have to be based on the solution of an equal number of simultaneous differential equations, a task which, with any of the means known at present, could not be carried out in a lifetime. And yet these decisions would . . . have to be made continuously . . .[32]

It is fascinating to note the twists and turns in Oskar Lange's reaction to the equation-solving argument. In his 1936 article, which was long considered the last word on the subject, Lange ridiculed the

[31]Lionel Robbins, *The Great Depression* (New York: Macmillan, 1934), p. 151.

[32]F. A. Hayek, "The Present State of the Debate," in Hayek, *Collectivist Economic Planning*, p. 212.

very terms of the problem. Adopting his "quasi-market" socialist approach, and ignoring the crucial Misesian problem of the necessary absence of any market in land or capital, Lange simply stated that there is no need for planners to worry about these equations, since they would be "solved" by the socialist market:

> Neither would the Central Planning Board have to solve hundreds of thousands . . . or millions . . . of equations. The only "equations" which would have to be "solved" would be those of the consumers and the managers of production plants. These are exactly the same "equations" which are solved in the present economic system and the persons who do the "solving" are the same also. Consumers . . . and managers . . . "solve" them by a method of trial and error . . . And only few of them have been graduated in higher mathematics. Professor Hayek and Professor Robbins themselves "solve" at least hundreds of equations daily, for instance, in buying a newspaper or in deciding to take a meal in a restaurant, and presumably they do not use determinants or Jacobians for that purpose.[33]

Thus, the orthodox neoclassical economic establishment had settled the calculation dispute with Lange-Lerner the acclaimed winner. Accordingly, when the end of World War II brought communism/socialism to his native Poland, Professor Oskar Lange left the plush confines of the University of Chicago to play a major role in bringing his theories to bear on the brave new world of socialist Poland. Lange became Polish ambassador to the United States, then Polish delegate to the United Nations Security Council, and finally chairman of the Polish Economic Council. And yet not once in this entire period or later, did Poland—or any other communist government, for that matter—attempt to put into practice anything remotely like Lange's fictive accounting-type, play-at-market socialism. Instead, they all put into effect the good old Stalinist command-economy model.

It did not take long for Oskar Lange to adjust to the persistence of the Stalinist Model. Indeed, it turns out that Lange, in post-war Poland, argued strongly for the historical necessity of the persistence of the Stalinist model as opposed to his own market socialism. Arguing

[33]Oskar Lange, "On the Economic Theory of Socialism, Part One," p. 67. The Norwegian economist and defender of Mises's position, Trygve Hoff, commented that "Quite apart from the fact that the equations the central authority would have to solve are of quite a different nature to those of the private individual, the latter tend to solve themselves automatically, which Dr. Lange must admit the former do not." Hoff, *Economic Calculation in the Socialist Society*, pp. 221–22. This excellent book on the socialist calculation controversy was originally published in Norwegian in 1938. In contrast to Bergson's almost contemporaneous survey article, Hoff's English-language translation, published in 1949 in Britain but not in the United States, sank without a trace.

against his own quasi-decentralized market-socialist solution, Lange, in 1958, revealed that "in Poland, we had some discussions whether such a period of highly centralized planning and management was historical necessity or a great political mistake. Personally, I hold the view that it was a historical necessity."

Why? Lange now claimed:

(a) that the "very process of the social revolution which liquidates one social system and establishes another requires centralized disposal of resources by the new revolutionary state, and consequently centralized management and planning."

(b) second, in underdeveloped countries—and which socialist country was not underdeveloped?—"Socialist industrialization, and particularly very rapid industrialization, which was necessary in the first socialist countries, particularly in the Soviet Union . . . requires centralized disposal of resources." Soon, however, Lange promised, the dialectic of history will require the socialist government to organize quasi-market, decentralized decision-making within the overall plan.[34]

Shortly before his death in 1965, however, Oskar Lange, in his neglected last word on the socialist calculation debate, implicitly revealed that his socialist-market "solution" had been little more than a hoax, to be jettisoned quickly when he indeed saw a way for the Planning Board to solve all those hundreds of thousands or millions of simultaneous equations! Strangely gone was his gibe that everyone "solves equations" every day without having to do so formally. Instead, technology had now supposedly come to the rescue of the Planning Board! As Lange put it:

> Were I to rewrite my essay ["On the Economic Theory of Socialism"] today my task would be much simpler. My answer to Hayek and Robbins would be: so what's the trouble? Let us put the simultaneous equations on an electronic computer and we shall obtain the solution in less than a second. The market process with its cumbersome *tatonnements* appears old-fashioned. Indeed, it may be considered as a computing device of the pre-electronic age.[35]

Indeed, Lange claims that the computer is superior to the market, because the computer can perform long-range planning far better, since it somehow already knows "future shadow prices" which markets cannot seem to obtain.

[34]Oskar Lange, "The Role of Planning in Socialist Economy," in *The Political Economy of Socialism* (1958) in M. Bornstein, ed., *Comparative Economic Systems*, rev. ed. (Homewood, Ill.: Richard D. Irwin, 1969), pp. 170–71.

[35]Oskar Lange, "The Computer and the Market," in A. Nove and D. Nuti, eds. *Socialist Economics* (London: Penguin Books, 1972), pp. 401–02.

Lange's naive enthusiasm for the magical planning qualities of the computer in its early days can only be considered a grisly joke to the economists and the people in the socialist countries who have seen their economies go inexorably from bad to far worse despite the use of computers. Lange apparently never became familiar with the computer adage, *GIGO* ("garbage in, garbage out"). Nor could he have become familiar with the recent estimate of a top Soviet economist that, even assuming that the planning board and its computers could learn the correct data, it would take even the current generation of computers 30,000 years to process the information and allocate the resources.[36]

But there is a more important flaw in Lange's last article than his naivete about the magical powers of the then-new technology of the computer. His eagerness to embrace a way of solving those equations he earlier had claimed didn't *need* conscious solving, demonstrates that he had been disingenuous in claiming that his pseudo-market trial-and-error method would provide a facile way for the socialist society to solve the calculation problem.

Socialist Impossibility and the Argument from Existence

Ever since 1917, or at least since Stalin's great leap forward into socialism in the early 1930s, the defenders of the possibility of socialism against Mises's strictures had one final, clinching, fallback argument. When all the arguments over general equilibrium or equations or entrepreneurship or Walrasian *tatonnements* or the command economy or pseudo-markets had been hashed over, the defenders of socialism could simply fall back on one point: Well, socialism exists, doesn't it? When all is said and done, it exists, and therefore it must be, for one reason or another, possible. Mises must clearly be wrong, even if the "practical" arguments of Hayek or Robbins, arguments of mere degrees of efficiency, need to be soberly considered. At the end of his celebrated survey essay on socialist economics Professor Abram Bergson put the point starkly:

> there can hardly be any room for debate: of course, socialism can work. On this, Lange certainly is convincing. If this is the sole issue, however, one wonders whether at this stage such an elaborate theoretic demonstration is in order. After all, the Soviet planned economy has been operating for thirty years. Whatever else may be said of it, it has not broken down.[37]

[36]Yuri M. Maltsev, "Soviet Economic Reform: An Inside Perspective," *The Freeman* (March 1990).

[37]Bergson, "Socialist Economics," p. 447.

In the first place, this triumphal conclusion now rings hollow, since the economies of the Soviet Union and the other socialist bloc countries have now manifestly broken down. And now it also turns out that the Soviet GNP and production figures that Bergson, the CIA, and other Sovietologists have been taking at face value for decades have been nothing but a pack of lies, designed to deceive not the United States, but the Soviet managers' own ruling elite. Even now, Western Sovietologists are reluctant to believe the Soviet economists who are finally trying to tell them the truth about these alleged and much revered data.

But apart from all that, this sort of seemingly decisive empiricist counter to the Misesian critique reveals the perils of using allegedly simple and brute "facts" to rebut theory in the sciences of human action. For why must we assume that the Soviet Union and the Eastern European countries ever really enjoyed full and complete socialism? There are many reasons to believe that, try as they might, the communist rulers were never able to impose total socialism and central planning. For one thing, it is now known that the entire Soviet economy and society has been shot through with a vast network of black markets and evasions of controls, fueled by a pervasive system of bribery known as *blat* to allow escape from those controls. Managers who could not meet their annual production quotas were approached by illegal entrepreneurs and labor teams to help them meet the quotas and get paid off the books. And black markets in foreign exchange have long been familiar to every tourist. Long before the Eastern European collapse of communism, these countries stopped trying to stamp out their black markets in hard currency, even though they were blatantly visible in the streets of Warsaw, Budapest, and Prague. Without uncontrolled black markets fueled by bribery, the communist economies may well have collapsed long ago.[38] This historical point has also been bolstered by Michael Polanyi's "span of control" theory, which denies the possibility of effective central planning from a rather different viewpoint than Mises's.[39]

But the decisive rebuttal has, once again, been levelled by Mises in *Human Action*: the Soviet Union and Eastern European economies were not fully socialist because they were, after all, islands in a world capitalist market. The communist planners were therefore able, albeit clumsily and imperfectly, to use prices set by world markets as

[38]One source on this pervasive system in the Soviet Union is Konstantin M. Simis, *USSR: The Corrupt Society* (New York: Simon & Schuster, 1982).

[39]Michael Polanyi, *The Logic of Liberty* (Chicago: University of Chicago Press, 1951), pp. 111–37 and passim.

indispensable guidelines for the pricing and allocation of capital resources. As Mises pointed out:

> People did not realize that these were not isolated social systems. They were operating in an environment in which the price system still worked. They could resort to economic calculation on the ground of the prices established abroad. Without the aid of these prices their actions would have been aimless and planless. Only because they were able to refer to these foreign prices were they able to calculate, to keep books, and to prepare their much talked about plans.[40]

Mises's insight was confirmed as early as the mid-1950s, when the British economist Peter Wiles visited Poland, where Oskar Lange was helping to plan Polish socialism. Wiles asked the Polish economists how they planned the economic system. As Wiles reported:

> What actually happens is that "world prices", i.e. *capitalist world prices*, are used in all intra-[Soviet] bloc trade. They are translated into rubles . . . entered into bilateral clearing accounts.

Wiles then asked the Polish communist planners the crucial question. Since the Poles were, as good Marxist-Leninists, presumably committed to the triumph, as soon as possible, of world-wide socialism, Wiles asked: "What would you do if there were no capitalist world" from which you could obtain all those crucial prices? The Polish planners' rather cynical answer: "We'll cross that bridge when we come to it." Wiles added that "In the case of electricity the bridge is already under their feet: there has been great difficulty in pricing it since there is no world market."[41] But fortunately for the world and for the Polish planners themselves, they were never truly forced to cross that bridge.

Epilogue:
The End of Socialism and Mises's Statue

In his supposedly definitive article of 1936 vindicating economic calculation under socialism, Oskar Lange delivered a once-famous gibe at Ludwig von Mises. Lange began his essay by ironically hailing Mises's services to socialism: "Socialists have certainly good reason to be grateful to Professor Mises, the great *advocatus diaboli* of their cause. For it was his powerful challenge that forced the socialists to

[40]Mises, *Human Action*, pp. 698–99.

[41]Peter J. D. Wiles, "Changing Economic Thought in Poland," *Oxford Economic Papers* 9 (June 1957): 202–03. Also see Murray N. Rothbard, "Ludwig von Mises and Economic Calculation Under Socialism," in Lawrence Moss, *The Economics of Ludwig von Mises*, pp. 67–77.

recognize the importance of an adequate system of economic accounting. . . . the merit of having caused the socialists to approach this problem systematically belongs entirely to Professor Mises." Lange then went on to taunt Mises:

> Both as an expression of recognition for the great service rendered by him and as a memento of the prime importance of sound economic accounting, a statue of Professor Mises ought to occupy an honorable place in the great hall of the Ministry of Socialization or of the Central Planning Board of the socialist state.

Lange went on to say that "I am afraid that Professor Mises would scarcely enjoy what seemed the only adequate way to repay the debt of recognition incurred by the socialists . . ." For one thing, Lange concluded, to complete Mises's discomfiture

> a socialist teacher might invite his students in a class on dialectical materialism to go and look at the statue, in order to exemplify the Hegelian *List der Vernuft* [cunning of Reason] which made even the staunchest of *bourgeois* economists unwittingly serve the proletarian cause.[42]

Curiously enough, Lange, during his years as socialist planner in Poland, never got around to erecting the statue to Mises at the Ministry of Socialization in Warsaw. Perhaps socialist planning was not successful enough to accord Mises that honor—or perhaps there were not enough resources to build the statue. In any case, the opportunity has been lost. The countries of Eastern Europe now stand in the rubble wrought by what used to be called in the 1930s "the great socialist experiment." Emerging gloriously out of the rubble of the collapse of socialism are a myriad of Misesian economists, to whom socialism is little more than a grisly joke. Even as early as the 1960s it was a common quip among economists that, at international economic conferences, "the Western economists talk about the glories of planning while the Eastern economists talk about the virtues of the free market." Now Misesian economists are springing out of the ruins of socialism in Poland, Lithuania, Czechoslovakia, Hungary, Yugoslavia (especially Croatia and Slovenia) and the Soviet Union. Neither socialist planning nor Marxism-Leninism hold any charms for the economists of the once-socialist nations.

In all of these countries, the giant statues of Lenin are being unceremoniously toppled from the public squares. Whether or not the coming free societies of Eastern Europe choose to replace them with statues of Ludwig von Mises, as the prophet of their liberation, one

[42]Lange, "The Economic Theory of Socialism," p. 53.

thing seems certain: there will be no statues erected to Oskar Lange in Cracow or Warsaw. It is hard to see how even the cunning of Reason and the Hegelian dialectic can make Lange out to be a prophet or an important contributor to the laissez-faire Polish economy of the future. Perhaps the closet approach was a bitter quip pervading Eastern Europe during the revolutionary year of 1989: "Communism can be defined as the longest route from capitalism to capitalism."