

Reflections on the Misesian Legacy in Economics

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As I begin this paper for the issue of the *Review of Austrian Economics* published in honor of the memory of Murray N. Rothbard, my mind goes back over 40 years, to the first time that I met him. It was at the opening session of the Seminar in Economic Theory which Professor Mises conducted in the fall semester of 1954. That occasion was also my first meeting with Ludwig von Mises, and it is etched deeply in my memory. Two statements by Mises at that seminar meeting stand out in my recollection. One statement was his very opening substantive sentence that evening. "The market," Mises began, "is a process." (See also the statement in *Human Action* [1966, p. 257]: "The market is not a place, a thing, or a collective entity. The market is a process.")

Coming as I did from a rather spotty undergraduate training in economics (and mainly along Keynesian lines), Mises's statement, I recall, left me completely puzzled. I *had* thought of the market as a place, an arena for exchanges, as an abstract idea referring to voluntary exchange transactions. I could not fathom what on earth could be meant by the observation that the market is a *process*. I now, in retrospect, consider that all my subsequent training and research in economics, both before and after obtaining my doctorate under Mises, has consisted in learning to appreciate what it was that Mises meant by this assertion.

The second statement by Mises which stands out in my memory from that September 1954 evening, is a reference that Mises made to Murray Rothbard. Murray had, it appeared, recently completed a paper which Mises found to be excellent. He briefly but warmly complimented Murray on that piece of work, and expressed the hope and the prediction that Murray would continue to produce a great deal of future work of similar excellence. The years since 1954 have amply borne out

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Mises's hope and his prediction. Murray Rothbard's output during these four decades has been prodigious. The breadth of his reading across so many disciplines has been breathtaking; his sheer energy in producing thousands of pages of published work has been stupendous. It is a privilege to contribute this paper to a memorial issue dedicated to the memory of Murray N. Rothbard.

My paper will have to do with the first of the two statements made by Mises at that 1954 seminar session. I will be taking issue with a certain tendency, present in a number of recent expositions of Mises's work, to de-emphasize (or even flatly to deny) the centrality of the idea of the market as a *process* in the Misesian system. I consider clarification concerning the character of the Misesian system to be of critical importance for the future direction of modern Austrian economics, and for its ability to contribute fruitfully to the restoration of economic understanding for the economics profession and for intelligent lay people at large. And this matter is also, of course, of fundamental importance in projecting an accurate overall view of Mises's own contributions. While I shall, in my argument, be taking issue with a number of relevant statements by Rothbard, I trust that the reader will appreciate that the purpose of this paper is simply to further that very Misesian legacy to which Rothbard dedicated his entire life's work as an economist. It is as a memorial to Murray Rothbard's consistency in this regard, and his willingness to bear formidable costs to his professional career in order not to compromise the honesty of his expositions, that this paper is being written. The purpose of any critical observations in this paper (whether directed at Rothbard or at others) is certainly not to stir up strife within the Austrian camp; quite the reverse. I am convinced that a clear, shared understanding of Mises's central vision can bring together all those who appreciate the intellectual content of the Misesian legacy. To contribute an attempt in this direction, in honor of the memory of an outstanding exponent of that legacy, is the purpose of this paper.

The Misesian Market Process

My own understanding of what Mises means when he describes the market as a process can be stated simply:

(1) Mises saw the market process as a continually *corrective* process driven and constituted by active entrepreneurial grasping of pure profits. "The essential fact is that it is the competition of profit-seeking entrepreneurs that does not tolerate the preservation of *false* prices of the factors of production. The activities of the entrepreneurs are the element that would bring about the unrealizable state of the evenly rotating economy if no further changes were to occur" (Mises 1966, pp. 337-38; emphasis in the original). The market process consists, that is,

in the continual correction of false prices that occurs in the course of entrepreneurial competition. If exogenous changes were not to occur, this corrective process would eventually lead to a price structure for factors of production and consumer goods, in which all entrepreneurial profit has been squeezed out. In the real world, at any given moment, factors of production are able to be purchased at false prices, prices which permit entrepreneurs to capture pure entrepreneurial profits. False prices are false in that they incorrectly reflect the relative urgency of consumer demand for the various alternative possible products that can be created with these factors. It is this discoordination between what *might* be produced and what in fact is being produced, which offers alert entrepreneurs opportunities for pure gain. "What makes profit emerge is the fact that the entrepreneur who judges the future prices of the products more correctly than other people do buys some or all of the factors of production at prices which, seen from the point of view of the future state of the market, are too low" (Mises [1951] 1962, p. 109). Entrepreneurs "are the first to understand that there is a discrepancy between what is done and what could be done." Their activity brings about a systematic adjustment of factor prices. They "bid higher prices for some factors of production and lower the prices of other factors of production by restricting their demand for them." Their activity also generates price adjustments for consumer goods. "In supplying the market with those consumers' goods in the sale of which the highest profits can be earned, they create a tendency toward a fall in their prices. In restricting the output of those consumers' goods the production of which does not offer chances for reaping profit, they bring about a tendency toward a rise in their prices. All these transformations go on ceaselessly and could stop only if the unrealizable conditions of the evenly rotating economy and of static equilibrium were to be attained" (Mises 1966, p. 336). All this ceaseless sequence of corrective price adjustments constitutes Mises's entrepreneurial market process.

(2) This Misesian corrective process from a false set of prices towards a set of fully mutually adjusted prices may be restated in the terms in which Hayek understood the market process to constitute a "discovery procedure" (Hayek [1968] 1978, chap. 12). "False" prices reflect the decisions of entrepreneurs who have not yet understood the correct implications of consumer preferences (present or future) for the relative values of resources today. The way in which entrepreneurial activity tends to correct such false prices is through their realization of the profit possibilities inherent in such false prices. Grasping these profit possibilities is the way in which entrepreneurs express their discoveries concerning the correct valuation of resources (and thus, in effect, concerning better ways in which resources can be

deployed in serving the preferences of consumers). The tendency which this entrepreneurial process generates towards equilibration is thus one of gradually enhanced mutual anticipation on the part of market participants. In the theoretical limit, in the hypothetical state of equilibrium in which no entrepreneurs would earn profit or suffer losses, we would be able to say that "all people . . . anticipate correctly the future state of the market" (Mises [1951] 1962, p. 108). Although it was Hayek, rather than Mises, who extensively articulated the nature of the market equilibrating process as one of gradually enhanced mutual knowledge, there can be no doubt that an interpretation of the Misesian process in terms of enhanced mutual knowledge is a valid one. Disequilibrium prices are "false" prices; as entrepreneurial profit taking nudges prices towards their correct levels, entrepreneurs have been led to more accurate anticipations concerning relevant future market configurations.

(3) What makes possible the entrepreneurially driven process of equilibration is active market *competition*. It is only the possibility of unrestricted entrepreneurial entry which permits more alert entrepreneurs to deploy their superior vision of the future in order to correct the misallocations of resources reflected in the false prices which characterize disequilibrium. It is the continual threat of such entry which tends to keep incumbent entrepreneurs alert and on their toes. The reason that Mises had little patience for the concept of perfect competition (see his approving reference to Hayek's pioneering essay on this matter "The Meaning of Competition," in Mises 1966, p. 278n), was that this concept can relate only to an already attained state of equilibrium. It has nothing to do with, and can throw no light upon, the competitive forces which drive the entrepreneurial market process. In deepening his (and our) understanding of the competitive process as consisting in a discovery procedure, Hayek was articulating insights that are, at the very least, thoroughly consistent with Mises's own understanding of the dynamic entrepreneurial competition which, for Mises, constitutes the heart of this market process.

The Shared Understanding of Mises and Hayek on the Market Process

To draw attention, as we have in the preceding paragraphs, to the shared understanding that is apparent in Mises's and Hayek's treatment of the market process, is not to "homogenize" separate systems or "paradigms" of economic thought. Mises and Hayek are, to be sure, distinct thinkers with different views—sometimes fundamentally different views—on many issues in economic theory and method. There is a definite contribution to be made, towards properly understanding

each of these two great Austrian economists, by drawing attention to the matters on which they disagree. But, we must insist, (a) the general character of the market process does *not* constitute such an area of disagreement; and (b) this area of shared understanding is so central to the work of both Mises and Hayek, that our awareness of their common position in this matter must definitively dispel any suggestion of the existence of a Misesian “paradigm,” in regard to the market process, that is sharply to be distinguished from a Hayekian “paradigm.” Yet such claims have recently been made.

Mises and Hayek Dehomogenized?

Professor Salerno has, in a number of recent papers (1990, 1991, 1993, 1994), initiated a line of intellectual historiography designed to drive a wedge between Mises’s and Hayek’s understanding of markets. Murray Rothbard and Jeffrey Herbener (Rothbard 1991, 1992, 1994; Herbener 1991) have hailed Salerno’s thesis as providing definitive grounds for the rejection by all “Misesians” of what Salerno, Rothbard, and Herbener see as grave “Hayekian” errors.¹

The asserted distinctions on the basis of which Salerno declares the existence of two paradigms, a Misesian and a Hayekian, can be summarized as follows: (a) Hayek was trained under Wieser, and this accounts for his failure to have absorbed the Mengerian insights which, through the teachings of Böhm-Bawerk, later matured into the Misesian position (Salerno 1993, p. 114); (b) Hayek believed that “in order for prices to fulfill their knowledge-disseminating and plan-coordinating functions, the economy must subsist in a state of (what Salerno calls) ‘proximal equilibrium,’ wherein realized prices are always fairly accurate indicators of future prices” (p. 128); Mises, on the other hand, considered the concept of equilibrium as only a mental tool. It “is impossible to determine and meaningless to suggest that the real economy is closer to the FSR [final state of rest], and therefore manifests a superior coordination of plans and greater allocative efficiency, at one instant of time than it was at a previous instant” (p. 129). The social role fulfilled by prices does not depend on the attainment or near attainment of the FRS. This leads directly to the next point. (c) For Hayek, allocative efficiency consists in plan coordination among market participants. For Mises, on the other hand, the social efficiency achieved by the market consists (and is *always* perfectly attained) in the *ex ante* “appraisal and allocation of resources [by entrepreneurs] in strict accordance with anticipated consumer preferences” (p. 130). Salerno recognizes that, in regard

¹Because of Salerno’s initiating and prominent role in the “two-paradigm” literature, this section refers primarily to his writings. However, similar statements can typically also be found in the above cited papers of Rothbard and Herbener.

to *ex post* efficiency, entrepreneurial errors are inevitable in a world of uncertainty and change. However, apparently the only systematic process which Salerno recognizes in Mises as tending to correct such *ex post* inefficiencies, is that in which less astute entrepreneurs come to be weeded out of the system through their repeated speculative failures and resulting losses (pp. 131ff). (d) For Hayek the essence of the market process and of its social function, is in its overcoming of the "knowledge problem" arising out of dispersed knowledge "among the multitude of individual consumers and producers" (p. 115). It is this property of the market, and its absence in the socialist economy, which identified, for Hayek, the fundamental weakness of socialist planning. For Mises, on the other hand, Salerno and his colleagues claim, even if the socialist planners were miraculously endowed with perfect information, they would nonetheless be unable to "rationally calculate how to combine resources to render efficient production" (Herbener 1991, p. 43).

It is, indeed, especially the interpretation of Mises's thesis concerning the impossibility of socialist economic calculation that has been perhaps the central focus of Salerno's "two-paradigm" thesis. After a number of pages in which Salerno (quite unsuccessfully, it must surely appear) seeks to refute Leland Yeager's definitive paper (Yeager 1994) demonstrating that Mises's thesis does, after all, require that we attribute to Mises at least implicit recognition of Hayek's "knowledge problem," Salerno sums up as follows: "Thus market oriented PC [i.e., perfect competition] theorists, such as Hayek and Yeager, and neo-classical/socialist GE [i.e., general equilibrium] theorists are brothers under the skin" (Salerno 1994, p. 119).² Let us indeed, then, take up Salerno's treatment of the Misesian thesis; it will, I believe, permit us to confront Salerno's major points of contention. We shall, I further believe, be able in this way to place our finger not only on the source of the two-paradigm fallacy, but (at the same time), also on a significant element in Mises to which Salerno has properly drawn attention. The circumstances that Salerno's recognition of this element in Mises has, in our judgment,

²The biting sarcasm employed in this assertion is but a relatively mild example of the rhetorical excesses appallingly to be found in the "two-paradigm" literature against such writers as Hayek, Lachmann, and others charged with having diverged from the asserted "Misesian paradigm." I take this opportunity strongly to protest the use of verbal terrorism in Austrian economics. Even if (which is far from being the case) the asserted criticisms of Hayek, Lachmann, and others were valid, there would be absolutely no justification for the manner in which these great economists have been treated in the literature under discussion. The near-demonization of Hayek and Lachmann for alleged deviations from an asserted Misesian orthodoxy is a most distressing phenomenon. If Austrian economists (and the *Review of Austrian Economics*) are to be able to work constructively in the rough and tumble of the intellectual market place, anything approaching rhetorical brawling must once and for all be rejected.

unfortunately misled him (and Rothbard) to see *fundamental* divergence where none exists, should not blind us to the value of this characteristically Misesian insight for Austrian economic understanding.

Mises and the Calculation Problem

Salerno and Rothbard are fully justified in emphasizing the subtlety of the Misesian concept of economic calculation. With much of what they say in exposition of that concept, this writer is in full agreement. He objects only to the quite unwarranted conclusion which they draw from that exposition to the effect that the Misesian calculation problem has nothing whatever to do with Hayek's knowledge problem. A possible contribution to this unfortunate misunderstanding lies, I believe, in Hayek's earlier ambiguity concerning the nature of his knowledge problem. This writer has for a number of years (see Kirzner [1984] 1992, p. 149), pointed out that Hayek's brilliant 1945 paper, "The Use of Knowledge in Society," was seriously confused in making it appear that the function of prices in communicating knowledge was a function that is filled, in principle, also in the state of equilibrium. Salerno and Rothbard would be on firm ground if they objected, as this writer has objected, to such an equilibrium treatment of the place of knowledge and the communication function of prices. But the truth is (as becomes evident in Hayek's later work, see especially Hayek [1968] 1978) that Hayek's knowledge problem relates fundamentally to those states of affairs in which—precisely because of the knowledge problem—market agents are making plans which do not, in the fullest sense of the term, dovetail with each other.

As Salerno and Rothbard point out, calculation is needed in order to appraise the wisdom of prospective action. Without the tool of genuine money prices, economic agents would be reduced to comparing goods sacrificed and goods received, in the face of their obvious heterogeneity and incommensurability. Such an agent would be called upon, in effect, (except in the simplest of Crusoe economies), to make decisions with his eyes closed; he would have no way of knowing whether his outcome represents profit or loss. Market prices provide the indispensable tool needed for calculation. Because the socialist society does not include resource markets, its central planners must operate without known resource values. Their decisions must be made, in effect, with eyes closed.

Under capitalism, entrepreneurs make their plans based on their entrepreneurial awareness of the resource prices they must pay in the more immediate future, and of the product prices they anticipate that they will be able to command in the more remote future. These anticipated prices provide the entrepreneur with cardinal numbers on the basis of which to appraise the profitability (or its absence) of prospective

entrepreneurial activities. In the absence of resource prices under socialism, rational central planning is literally impossible, as Mises stated (and as Salerno and Rothbard quite correctly emphasize in their interpretation of Mises).

Where Salerno and Rothbard have (as demonstrated by Yeager) gone astray,³ is in their refusal to recognize that this impossibility of rational calculation and action under socialism *can* illuminatingly be recognized as arising out of the limitations of the human planning mind—in other words, as consisting in a disastrous knowledge gap which, without market prices for resources, it is impossible to bridge. We may readily concede that Mises did not articulate his calculation problem in terms of knowledge; but this does not in the slightest imply that that problem *cannot* be seen to consist of a knowledge problem. Reasonable interpreters of Mises may disagree on whether (as this writer emphatically believes to be the case) Mises's calculation problem is indeed seen *more* clearly when its knowledge implications are made explicit. But there is no basis whatever for claiming that, in exposing these knowledge implications of the Misesian argument, one is distorting or falsifying that argument.

To be unable to calculate the worthwhileness of a prospective action taken in a market society, is, after all, *to not know the importance to others* of the goods and services one commits to that action, and the importance to others of the goods one will obtain from that action. It is quite true, that Mises pointed out (and Salerno and Rothbard cite this again and again) that the calculation problem would exist even for a socialist planning authority possessing on its desks and in its computer memories, the fullest technological information of the age, full information on available resource availabilities, and full (and somehow, unanimous) information of the social ranking of the importance of ends. This is because, even armed with such "knowledge" (or, perhaps, precisely because the authority would be engulfed by these floods of information), the members of the authority would still *not know what they would need to know*, in order to calculate. As Leland Yeager has explained, *possessing* all this information is not the same as having *assimilated* it, and having been able to deploy it (whether by computing the solution to simultaneous equation systems, or whatever) to discover the relative values of the relevant resources and products. The members of the authority

³This paper concentrates critically only upon those aspects of Salerno's and Rothbard's papers which are directly relevant to our placing the market process at the center of Mises's system. We do not take up here any criticism of a number of related assertions contained in these papers (concerning: entrepreneurship, uncertainty, the future, alertness, discovery, and coordination) which this writer finds puzzling, contradictory, or otherwise based on possible misunderstanding.

would not know what one needs to know in order to calculate the worthwhileness of prospective decisions.

For Mises (as Salerno and Rothbard correctly point out) prices are not primarily signals economizing on the cost of *communicating* information.⁴ Their social function consists in providing decision makers with meaningful cardinal numbers with which to calculate the worthwhileness of prospective actions. To be “meaningful” we do not require these cardinal numbers to be roughly equal to or close to relevant equilibrium values. We require only that, at each point in time, these cardinal numbers reflect the interplay of the decisions made by the keenest (as well as those less keen) of the entrepreneurial minds in the market economy. In all this, I am in complete agreement with Salerno and Rothbard.

But it is precisely here, I believe, that Salerno and Rothbard have, in properly drawing attention to an underemphasized element in Mises’s position on economic calculation, been led into error. The element being here referred to is that, for Mises, even market prices that are very far from their equilibrium values perform a valuable role in enabling entrepreneurs to calculate. Let me emphasize even more starkly the aspect of this element in Mises which appears to have most impressed Salerno and Rothbard: *Even if we could imagine that the equilibrating market process has not yet succeeded in nudging disequilibrium prices at all towards equilibrium, these prices yet perform their social role in making possible economic calculation.* It is apparently this aspect of the Misesian position which has taught Salerno and Rothbard that what makes calculation possible cannot be and is not that knowledge-enhancing process which, for Hayek and other Austrians, constitutes the process of market equilibration. It followed, for these two scholars, that the Misesian calculation problem under socialism cannot and must not be identified with the Hayekian knowledge problem (which tends to become solved during the course of the equilibrating market process). But there is no reason at all to arrive at such an understanding (or, rather, misunderstanding) of Mises’s position.

False Prices and Less False Prices

As cited earlier, Mises certainly did recognize that disequilibrium market prices are, in a sense, “false prices”: they reflect erroneous expectations (i.e., erroneous “knowledge”) being held by entrepreneurs

⁴This is the aspect of Hayek’s 1945 paper which the mainstream literature (and now Salerno, et al.) have seen as central to Hayek’s position. This writer has long deplored according centrality to such a “communication” role, and has argued that Hayek’s later work suggests that he, too, saw beyond such a narrow interpretation of the role of prices (see Kirzner [1984] 1952, chap. 8).

concerning the true preferences of consumers. It is the equilibrating force generated by the process of entrepreneurial competition, we saw, which for Mises tended to replace false prices by less false prices. We have every reason to believe that, when Mises sees market prices as effective tools for entrepreneurial calculation, his view of prices is, at the very least, rendered even more benign by his understanding of the market process in which *earlier* false prices have tended to have become replaced by less false prices. (Of course this tendency *may* be frustrated by entrepreneurial error in an uncertain, changing world. There is no *guarantee* that today's prices are *necessarily* less false than yesterday's. But this possibility does not eliminate the existence of a systematic process in which entrepreneurial profit-seeking activity identifies those false prices which promise pure profits, and, by grasping those profits, tends to replace them by prices which more accurately reflect the true values to consumers, of resources and products.)

Salerno and Rothbard are right to emphasize that for Mises the prices which prevail at *any* time fulfill their function of rendering economic calculation possible. This, we must insist, is *not* because all prices, at all times, are "market clearing prices," in any sense relevant for our evaluation of the social efficiency of the price system. After all, false prices reflect production plans which *are*, by definition, at variance with the true preferences of consumers. The Misesian insight that all prices, at all times, render economic calculation possible, arises out of two closely related circumstances: (a) at each instant in time, the price offers and bids, and thus also the realized prices, reflect the expectations of the most canny entrepreneurs in the market (so that what may, a day later, with the wisdom of hindsight, indeed be seen as having been false prices, were nonetheless, in terms of the most perceptive entrepreneurial assessment of the preceding day, at that time expressive of the most judicious readings—the best *knowledge*—of consumer preferences); (b) at each instant in time, current prices *are* the outcomes of processes of entrepreneurial profit-seeking corrections of still earlier false prices; at no time, in the real world, can we say that the corrective market process has not yet begun its work. At each instant, therefore, current market prices reflect the best conceivable estimates of relative consumer preferences. The calculations which entrepreneurs make by reference to such prices (and by reference to such expected future prices), are thus informed by the assessment of the shrewdest of entrepreneurs, operating under the powerful incentive of winning pure profits.

What we wish to stress is that the capacity of market prices to inspire calculative economic activity is based solidly on the extent to which prices do express correct assessments of (i.e., the relevant

knowledge regarding) both current and future preferences of consumers, and the current and future production plans of other entrepreneurs. As Mises pointed out in his first statements on the calculation problem (see, e.g., Mises [1922] 1936, pp. 115–17), market prices are not perfect tools in this respect: but they are extraordinarily valuable tools nonetheless. Their value surely lies in the expression of the best available entrepreneurial knowledge concerning market conditions.

It is quite true that for Mises this “best available entrepreneurial knowledge” expressed in current market prices would be valuably useful for calculation purposes *even if* one could imagine these prices *not* already to reflect the corrective entrepreneurial market process which tends to replace false prices with prices less false. But the circumstance that in fact current market prices reflect that corrective market process (and our awareness that Mises did indeed emphasize this circumstance in regard to market prices) should convince us that an appreciation of the role of market prices stated in terms of the “Hayekian” knowledge problem is simply a somewhat differently articulated appreciation for the calculative properties Mises taught us to understand to exist in those market prices.

Some Observations on the Misesian Legacy

Mises had a profound and subtle understanding of the market’s operation. In that understanding, the character of the market as a process in which mistaken entrepreneurial judgments tend to come to be replaced by more accurate judgments (and thus one in which false prices are replaced by less false prices), was a central feature: Hayek, too, had his own understanding of the market’s operation. In certain respects, particularly in its articulation of the role of knowledge and discovery, that understanding can be differentiated from that of Mises. *But the centrality of the knowledge-corrective character of the market process for both Mises and Hayek cannot seriously be doubted.* Whatever the differences between a Hayekian articulation of the market process and a Misesian articulation, *the centrality of the notion of the corrective process for both, is the crucially important circumstance.* It is this that should convince us that any talk of a Hayekian “paradigm” which differs fundamentally from the Misesian paradigm should be dismissed as not only reflecting a mistaken doctrinal judgment, but as reflecting a mistaken judgment with potentially catastrophic implications for the future of Austrian economics.

Austrians are a beleaguered minority in the economics profession today. One of the core doctrinal issues separating Austrian economics from the mainstream is that Austrians understand the entrepreneurial

character of the market process. We learned this from Mises. From Hayek we learned additional, complementary insights. If we wish to preserve and build upon the Misesian legacy, we must not generate confusion (both among Austrians and their opponents) by exaggerating perceived differences between Mises and Hayek, to the point where the centrally shared insights of both are dangerously obscured.

References

- Hayek, Friedrich A. von. 1978. "Competition as a Discovery Procedure." In *New Studies in Philosophy, Politics, Economics, and the History of Ideas*. Chicago: University of Chicago Press. Chap. 12. This paper was delivered as a lecture in 1968.
- Herbener, Jeffrey M. 1991. "Ludwig von Mises and the Austrian School of Economics." *Review of Austrian Economics* 5 (2): 33–50.
- Kirzner, Israel M. 1984. "Prices, the Communication of Knowledge and the Discovery Process." In Kurt R. Leube and Albert H. Zlabinger, eds., *The Political Economy of Freedom: Essays in Honor of F. A. Hayek*. Vienna: Philosophia Verlag. Reprinted in Kirzner, *The Meaning of Market Process: Essays in the Development of Modern Austrian Economics*. London and New York: Routledge, 1992. Chap. 8.
- Mises, Ludwig von. 1936. *Socialism: An Economic and Sociological Analysis*. J. Kahane, trans., London: Jonathan Cape; German original published in 1922.
- . [1951] 1962. "Profit and Loss." Reprinted in *Planning for Freedom*. 2nd ed. South Holland, Ill.: Libertarian Press. Chap. 9.
- . 1966. *Human Action: A Treatise on Economics*. 3rd rev. ed. Chicago: Contemporary Books.
- Rothbard, Murray N. 1992. "The Present State of Austrian Economics." Working Paper of the Ludwig von Mises Institute. November.
- . 1994. Review of *Austrian Economics: Tensions and New Directions*. Bruce Caldwell and Stephan Boehm, eds., *Southern Economic Journal*. October.
- . 1991. "The End of Socialism and the Calculation Debate Revisited." *Review of Austrian Economics* 5 (2): 51–76.
- Salerno, Joseph T. 1990. "Ludwig von Mises as Social Rationalist." *Review of Austrian Economics* 4: 26–54.
- . 1991. "Commentary: The Concept of Coordination in Austrian Macroeconomics." In Richard M. Ebeling, ed., *Austrian Economics, Perspectives on the Past and Prospects for the Future*. Champions of Freedom Series. Vol. 17. Hillsdale, Mich.: Hillsdale College Press.
- . 1993. "Mises and Hayek Dehomogenized." *Review of Austrian Economics* 6 (2): 113–46.
- . 1994. "Reply to Leland B. Yeager on 'Mises and Hayek on Calculation and Knowledge'." *Review of Austrian Economics* 7 (2): 111–25.
- Yeager, Leland B. 1994. "Mises and Hayek on Calculation and Knowledge." *Review of Austrian Economics* 7 (2): 93–109.