

THE DISMAL FATE OF SOVIET-TYPE ECONOMIES: MISES WAS RIGHT

Gertrude E. Schroeder

Introduction

The economies of the Soviet Union and Eastern Europe are socialist economies as defined by Karl Marx, Ludwig von Mises, and the *New Palgrave Dictionary of Economics*. According to the latter, "A society may be seen to be a socialist one if the major part of the means of production of goods and services are not in private hands, but are in some sense socially owned and operated, by state, socialized, or cooperative enterprises."¹ For Mises, public ownership of the means of production destroyed the very essence of a market economy—a mechanism for valuing the scarce factors of production used to serve society's wants, so as to satisfy those ever-changing wants at least cost. Efficient valuation of scarce factors, Mises argued, requires private ownership of land and capital, because it is the owners who can best assess the risk/reward balance in evaluating and choosing future endeavors. Since their own capital is at risk, owners have the maximum incentive to make the correct choices among many that are possible and also to monitor carefully the actions of the managers to whom, in the modern world of large-scale organizations, the owners must necessarily delegate authority. Mises (1967, p. 106) foresaw with uncanny prescience the consequences of attempts to create an economic order based on pervasive public ownership of property: "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."

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The author is Professor of Economics at the University of Virginia. An earlier version of the paper was presented at the annual meetings of the Southern Economic Association in New Orleans, November 18–20, 1990. The session was entitled "Eastern Europe: Mises Was Right."

¹Alec Nove, "Socialism," in *The New Palgrave* (1987, p. 398).

The results of over 70 years of experience in the Soviet Union with a socialist economic order and of more than 40 years of such experience in six countries in Eastern Europe allow us to judge the accuracy of Mises's forecast.

Institutions of the Soviet-Type Economy

All seven countries—the USSR, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Romania—adopted a similar set of economic institutions. Briefly, they are the following: public (predominantly state) ownership of land and capital; administrative allocation of land and capital by government bureaucracies; dictation of the product mix by means of detailed plans directed to individual firms and farms; administratively set and infrequently changed prices; business firms that operated on formal profit-and-loss accounting rules but also were subordinated to government agencies (ministries); incentives related to jobs and oriented toward meeting one or several specific plan targets; and quasi-markets for labor and in household consumption. Despite a plethora of so-called reforms over the years, these institutions proved remarkably durable, at least in essence, if not in detail. It is these socialist institutions, replacing the market, that have shaped the behavior of the business firms and their workers. Their behavior, in turn, has been the major determinant of the economic outcomes observed in all countries.

Besides these institutions, the economic outcomes in Soviet-type economies have been shaped by a common development strategy, chosen by Stalin for the USSR in the late 1920s and imposed by him on Eastern Europe in the late 1940s. In the service of the state planners' goal of rapid industrialization, these countries adopted a grossly unbalanced growth model, allocating disproportionate shares of resources to investment rather than to consumption, to industrial investment rather than to agriculture and services, and to heavy industry (producer goods) in preference to consumer goods. While not necessarily inevitable under a socialist order, this development strategy was a logical choice, once the state, rather than markets and consumers, took charge of the allocation of capital and the determination of the bill of goods.

The Experience of Soviet-Type Economies

The experience of all seven countries under socialism displays a common pattern. Measured economic outcomes are similar, as are the revealed problems, and so are the underlying causes. Mises (1947, p. 83) summed it up succinctly: Socialism "will squander the

scarce factors of production, both material and human. Chaos and poverty for all will unavoidably result." While some people may regard this as an overstatement, few if any of them are to be found among today's reformers in the Soviet Union and Eastern Europe.

Economic Growth

Socialist countries proved capable of obtaining growth rates for both GNP and GNP per capita that, on average, did not differ significantly from those in OECD countries. Such was the finding of an econometric analysis made by Frederic Pryor (1985) for the years 1951–79. Although industrial production rose somewhat more rapidly in the East than in the West, other nonagricultural sectors grew more slowly. But retardation in growth was more pronounced in the East. In the 1980s, however, growth was markedly slower in the East. During 1981–89, GNP increased at an average annual rate of 1.7 percent in the USSR and Eastern Europe, compared with growth in developed Western countries at an annual average of 3.0 percent.² A similar picture is shown by data on growth of GNP per capita. Clearly, the growth process in the East was bogging down.

Productivity

Pryor's work also showed that rates of growth in factor productivity (dynamic efficiency) were lower in the East than in the West, and retardation in productivity growth in the East was more pronounced. Although rates of growth of labor productivity in the East compared rather favorably with those in the West, they, too, have slowed markedly. Since investment shares in GNP were generally higher in the East, the investment costs of economic growth have been higher there, and the consequent squeeze on consumption has been greater. Socialist growth was fueled by rapid mobilization of labor and capital, and expansion of factor inputs provided the overwhelming bulk of growth of GNP (except in East Germany). This "extensive" growth model had become increasingly unviable, as labor force participation ratios reached a near maximum, population growth slowed, and marginal productivities of capital declined. In a growth accounting framework, the failure of the socialist system to generate offsetting productivity gains helps to explain the strong retardation in economic growth. Using this framework, Abram Bergson (1989, p. 22) found that levels of GNP per worker in socialist countries were lower by 25 to 34 percent than those in OECD countries, when allowance is made for differences in capital per worker and labor is adjusted for

²Central Intelligence Agency (1990, pp. 36–37).

hours, quality, and education; he attributes this difference largely to systemic factors.

The “squandering” of scarce resources in socialist countries has been revealed in many other studies. Thus, John Moroney (1990, p. 212), using data for the late 1970s, finds that energy consumption per unit of real product and per unit of capital was twice as high, on the average, in the CMEA countries (USSR and Eastern Europe) as in Western Europe. Moreover, the East has relied to a much greater extent on energy relative to capital as a source of growth than has the West. Moroney’s findings are consistent with those of other investigators. Gomulka and Rostowski (1988, p. 491) find that CMEA countries had higher intensities in the use of raw materials, especially energy, than does the West and that these “gaps” have been increasing. Other aspects of efficiency could be addressed. The poor quality and design of products manufactured in the East is indicated by a mass of anecdotal evidence of consumer dissatisfaction, by the technological backwardness of the capital stock, and by the poor salability of manufactures to Western markets, not to mention the perennial complaints of CMEA members about the quality of one another’s products that enter their mutual trade.

Shabby Living Standards

To quote Mises (1947, p. 54), once more, “Communism is a feature of backward countries and results in general poverty.” Living standards in the USSR and Eastern Europe, even after decades of industrialization, are low by comparison with Western Europe, and the gaps have been widening overall, especially in the past two decades.³ Although at present an intense controversy rages over the quantitative levels of per capita consumption in the socialist countries relative to the West, it is clear, nonetheless, that as a group they are among the poorest countries in Europe, ranking above Turkey, but well below even such countries as Austria, Spain, and Portugal. Czechoslovakia has been unable to keep pace with Austria by a wide margin, East Germany with West Germany, and the USSR even with Portugal. The causes of the relatively low levels and widening disparities in per capita consumption between East and West are to be found in the relatively low shares of consumption in GNP in the Eastern countries, in the high investment costs of their growth, and in the low productivity of their workers.

Such quantitative assessments of relative living standards in the socialist countries considerably overstate both their progress relative

³See, for example, Schroeder (1987).

to Western market economies and their present comparative levels. This is so, because in the West the increased flow of goods and services has been accompanied by a concomitant flow of retail trade services, while such was not the case in the East; there, the governments for decades skimmed on investment in the retail sector in particular and in consumer-oriented infrastructure in general. Moreover, the measures of quantitative levels of per capita consumption do not capture other aspects of consumption that affect people's welfare. To acquire the goods and services that the measures try to estimate as accurately as possible, consumers in socialist countries had to cope with pervasive but random queues (lines or waiting lists), were forced to go from store to store to find desired items, and had to face disequilibrium prices. These phenomena entail sizeable welfare losses for consumers in the East, relative to their Western counterparts. Finally, the quantitative measures cannot reflect completely the relatively much greater variety, better packaging, and more attractive design and fashion of products, not to mention the more pleasant service generally prevailing in the West, where providers must cater to consumers' wants in order to survive.

Income Distribution

A common claim for socialism is that such a system, having eliminated the incomes from private property ownership, will result in a much more egalitarian distribution of personal incomes than is to be found under capitalism. The data needed to assess this important matter leave much to be desired for all countries. Nonetheless, using such data as are at hand, Bergson (1984) in an exhaustive survey for the USSR finds that the distribution of income there was well within the range for capitalist countries and most closely resembles that in such countries as Norway and the United Kingdom. Christian Morrison (1984), taking into account not only money incomes, but also incomes in kind and the value of perks, finds that income distribution in the socialist countries of Eastern Europe was not more egalitarian than in capitalist countries. Specifically, he finds two groupings among countries in each system—a group with relatively less egalitarian distributions as measured by Gini coefficients and a group with relatively more egalitarian distributions. Finally, with regard to earnings differentials between men and women, Moroney (1979) concludes that the overall earnings shortfall for women was about the same under both economic systems.

Root Causes of Poor Performance in Soviet-Type Economies

Two fundamental factors are at the root of the poor performance of socialist countries relative to their capitalist counterparts. The first

is the pervasive faulty valuation of the factors of production and of their products. Socialist states have had to sail the economic seas like ships without compasses. Mises (1937, p. 122) put it thus:

And then we have a socialist community which must cross the whole ocean of possible and imaginable economic permutations without the compass of economic calculation. All economic change, therefore, would involve operations, the value of which could neither be predicted beforehand nor ascertained after they had taken place. Everything would be a leap in the dark. Socialism is the renunciation of rational economy.

And again (Mises 1947, p. 83):

A socialist management of production would simply not know whether or not what it plans and executes is the most appropriate means to obtain the ends sought.

Mises's basic argument is that with social ownership of land and capital there cannot be markets for those factors of production. Without markets for them, these scarce factors cannot be priced so as to reflect their values in alternative uses and their changing relative scarcities. All monetary price tags that the monopoly owner—the state—may attach to the factors of production in practice can only be arbitrary. Without rational prices for all factors used in their production, the products (both intermediate and final) also cannot be efficiently priced.

In practice, the Soviet-type economies found product pricing to be a perennial problem. For the most part, land was not valued at all and was not taken into account in the pricing of goods. Capital costs were recovered mainly by inclusion of administratively set depreciation charges in the average labor costs (past and present) that underlie the prices of all products. Such an approach derives from Marxian value theory. Although details vary among countries, the essential features are the following.⁴ Producer prices for all goods are calculated as average, branch-wide costs of labor and materials plus an arbitrary profit markup. Prices were changed periodically to reflect accumulated changes in those costs and planners' decisions about the size of markups. Consumer prices were determined by adding to their prime cost the applicable distribution markups and taxes (or subsidies). In practice, retail prices contained large taxes on so-called luxuries (alcoholic beverages, clothing, and durables) and large subsidies on food and rents. Clearly, such prices reflect neither opportunity costs for producers nor relative utilities for consumers. They distort the perceptions of planners and enterprises even to the lim-

⁴For an excellent summary for each country, see Marer (1985, pp. 120–64).

ited extent that they are used to guide choice, and they skew the pattern of demand of consumers. The pricing factor alone produces a world of crooked mirrors in socialist economies.

The second fundamental consideration underlying the poor performance of socialist economies is the system of incentives. To quote Mises (1967, p. 116), "The exclusion of free initiative and individual responsibility, on which the successes of private enterprise depend, constitutes the most serious menace to socialist economic organization." To begin with, collective ownership deprives the socialist economy of the incentives for efficiency that derive from private owners' striving to enhance the worth of assets, along with the value of the income stream from their use. Moreover, socialism in practice has abolished competition among business firms, substituting the farce of "socialist competition" oriented toward overfulfilling plan targets of one kind or another. Profit seeking has not been made the primary goal of socialist managers, and even if it had been, the distorted prices for both inputs and outputs that managers face necessarily would deprive accounting profits of economic meaning.

Having eschewed the "stick" of competition and the "carrot" of profit seeking as incentives for producers, socialist planners were forced to devise suitable substitutes. The problem has proved to be insoluble. In practice, managerial rewards were tied in one way or another to meeting plan targets for production in physical or value measures. Other plan targets, such as profits or productivity indicators, tended to have secondary priority in the administration of incentive schemes. Because firms were subordinated to government agencies, which appointed managers and administered the rules of the game, the incentives for managers of socialist business firms came to resemble those of employees in a bureaucracy.⁵

In the final analysis, it is the behavior of the business firms and their workers that determines final economic outcomes in any economic system. It is they who engage in production and exchange, which are the essence of the economic process. Responding to the system of incentives and the flawed valuations of inputs and outputs that it faced, the socialist business firm displayed a unique but universal behavioral pattern.⁶ The socialist firm does not have to "sell" its product or "buy" its materials, because products are "distributed" and raw materials are "allocated" by central authorities. Similarly, the firm does not have to seek out investors and lenders, because capital goods and bank credits, too, are allocated administratively.

⁵For an elaboration of this argument, see Greenslade and Schroeder (1977).

⁶See, for example, Berliner (1957); Granick (1954, 1975); Jeffries (1981).

The socialist firm's position thus became one of extraordinary security; it never faced bankruptcy, but instead could count on being rescued by its superiors in the administrative hierarchy if things went wrong (Kornai's "soft budget constraint").

The resulting behavioral pattern of business firms is found in all of the socialist countries. The firm displays a short-term orientation. It juggles its product mix in the service of the particular bonus arrangements it faces, often to the detriment of the interests of customers. It searches for safety factors, so as to ensure meeting plan targets, by understating its production potential, seeking easy quotas, and hoarding materials and labor. It neglects "secondary" assignments such as improving the quality of products and raising worker productivity. Finally, and perhaps most critical of all, it seeks to avoid risk, eschewing innovation "as the Devil shies away from incense," as the former Soviet leader Leonid Brezhnev once put it.⁷ Indeed, this drag on innovation at the level of the enterprise, reinforced by the bureaucratization of the innovation process in general, goes a long way in accounting for the sluggish rate of technological progress manifested in the economic performance of socialist countries.

The Decades-Long Treadmill of Attempts to Reform Socialism

Since the debilities created by socialist institutions were visible almost from the start, the USSR and the East European countries soon embarked on a ceaseless search for solutions. Although tinkering with socialist working arrangements began in most countries in the 1950s, the search became more feverish in the 1960s, triggered by Nikita Khrushchev's brand of *glasnost* in the Soviet Union and spurred by the general perception that an upsurge in efficiency was imperative if the deceleration in growth was to be halted and increasingly dissatisfied populations placated. Since the mid-1960s, we have witnessed a veritable treadmill of reforms in socialist countries, as reforms were launched and then soon followed by reforms of those reforms that had failed to yield the desired results. Although the timing, details, and pace of these successive reforms varied greatly among countries, all blueprints had a common ingredient—the attempt to achieve improved economic performance without fundamentally altering the basic institutions of socialism. Innumerable changes were made in organizational forms, pricing arrangements, and the rules of the game for business enterprises. Mises (1983, pp.

⁷*Pravda*, 31 March 1971.

194–95) predicted the outcome many decades ago: “The problems of socialization cannot be solved by civil-service instructions and reforms of organizations.”

A major theme in the successive waves of reforms in most countries was the use of so-called economic levers—sales, prices, profits, bank credits, and formation of enterprise incentive funds—in an attempt to orient the socialist business firms toward pleasing customers and economizing on resources. The process was carried furthest in Hungary and in Poland. To this end, innumerable and complex changes were made in the rules of the game for enterprise managers. Their bonuses were tied to an ever-changing array of these “levers.” Firms were allowed to form their “own” incentive and investment funds, retaining more of their “own” profits to do so, and were given greater latitude in making decisions about the disposition of these funds. The aim was to get socialist firms to behave like capitalist firms by aping market forms, but without giving these forms the economic content that they have in market economies and without altering the fundamental position of the firm as the property of the state. Such attempts were like trying to square the circle. They were doomed to failure. Mises (1967, pp. 120–21) put it thus:

A popular slogan affirms that if we think less bureaucratically and more commercially in communal enterprises, they will work just as well as private enterprises. . . . [But] the entrepreneur’s commercial attitude and activity arise from his position in the economic process and is lost with its disappearance . . . [a process] which allows the identification of the firm’s and his own interests.

In effect, the reformers were attempting to create some species of a “market socialism.” Although *no* country attempted to replicate the set of specific arrangements prescribed by Oskar Lange in the famous “socialist controversy” of the 1930s, the idea was that some combination of market forms and socialist property arrangements could provide a viable alternative to capitalism. In Hungary, in particular, the reforms included a concerted attempt to develop regulated markets and to encourage a variety of ownership forms in small-scale endeavors. But, as described by Kornai (1986), real markets failed to materialize, and state and collective property ownership remained overwhelmingly dominant. There, as elsewhere, the multitudinous reforms failed to arrest the deterioration in the performance of the socialist economy.

In the face of such failures and with the advent of new leaders in some countries in the early and mid-1980s, the ideologically sensitive issue of property ownership and its influence on people’s behavior became a theme in the reform debates, first in Yugoslavia and

Hungary, and later even in the traditionally orthodox Soviet Union after Gorbachev became General Secretary of the Communist Party in March 1985. The new Soviet leader began talking about the need to induce “proprietary attitudes toward socialist property” and later declared that socialist property had become “nobody’s property, having no real owner,”⁸ with seriously adverse economic consequences. After that declaration, the debates about the role of property ownership in the reform process took off in the USSR and elsewhere. The ownership issue has increasingly dominated the discussion in the past two years in the USSR, Hungary, and Poland, and more timidly elsewhere in Eastern Europe. Legislation permitting a diversity of forms of ownership has been adopted in several countries, including the USSR, where the particularly sensitive issue of land ownership has also been raised.

In most countries of Eastern Europe, especially following the political upheavals in 1989, and also in the Soviet Union in 1990, the twin themes of “privatization” and “marketization” now dominate the reform debates and provide the framework for reform blueprints. If laws and blueprints go far enough and if they are translated into reality, socialism as defined by Marx, Mises, and the *New Palgrave Dictionary* will cease to exist in the USSR and Eastern Europe. That, of course, is a very big “if.” But after decades of experience with socialism, many people in the USSR and Eastern Europe have ceased to believe in the desirability of some “Third Way”—some species of a “market socialism”—and have joined with Mises (1937, p. 122) in his conviction that “the choice is still *either* socialism *or* a market economy.”

The Terrible Legacies of Socialism

The replacement of a market economy with a socialist one that lasted over many decades has left an awesome mess for today’s reformers aiming to reverse the process. Such an outcome, however, would have been no surprise to Ludwig von Mises. Reforming governments in the Soviet Union and Eastern Europe, if they stay the course, will be struggling with these legacies for a very long time, perhaps even a generation or more. The pain that will be required to overcome these shackles inevitably will strain the political process, delay implementation of reforms, and make the benefits from the new arrangements slow to come.

The most serious legacy is the fact that in all countries the state still owns the vast bulk of property, virtually all of it in the industrial

⁸*Kommunist*, no. 3 (February 1987), p. 7.

sector. Many critical decisions must be made. Which properties are to be sold? What bundle of rights to property shall be sold? To whom? At what price? In what form shall payments be required? Moreover, to make the transferred property rights meaningful, a legal code spelling out and guaranteeing those rights must be in place. Institutions, such as stock exchanges, must be created. The evolution of a system of private property took place over many, many decades in the West. Although socialism was able to destroy private property virtually overnight, its resurrection and solidification will be a protracted process.

Associated with state property ownership is the physical legacy left by the state's gross mismanagement of society's capital. This legacy is to be seen in the huge capital stocks that have been built up in the USSR and Eastern Europe—assets that are largely obsolescent and of poor physical quality by Western standards. Socialist management has produced a distorted world—an overgrown industrial sector dominated by smokestack industries alongside seriously underdeveloped service sectors, especially commercial and business services. Factories are too large and employ far too many people, are located in the wrong places, use the wrong technologies, and are organized in the wrong way, compared with the situation that would have been brought about by market forces. Environmental damage has been inordinately great. Socialism also has bequeathed a world of monopolies to its successors. Concentration ratios are extremely high, and plants are inordinately large. A kind of gigantomania has prevailed. The extensive network of small-scale subcontracting and service firms that facilitate the manufacturing process in the West scarcely exists in socialist USSR and Eastern Europe. But the new capitalist institutions when established must begin to operate with the existing capital assets. Restructuring of industries and renovating of large capital stocks will require much time and huge new investments. From where are they to come? And how can governments cope with the large-scale unemployment and relocation of workers that is inevitable in the process?

And then there are the legacies embodied in the human capital that has been accumulated under decades of a socialist order. This legacy has a number of facets. People lack the work attitudes, education, and skills that will be required to thrive in a market economy that can compete with the West. People are accustomed to lax work effort, subsidized food and rent, full employment, and a low-grade welfare state milieu. How are attitudes and expectations to be reshaped? How shall the labor mobility required by a market economy be achieved in countries with acute shortages of housing and

enterprise-based welfare systems? Enterprise managers trained under socialism lack the skills and “business culture” needed to compete in a market economy. Bankruptcy and competition are alien concepts, and risk taking is foreign to a socialist environment. How is a reforming government to deal with pleas for help from its formerly owned firms, especially from the large ones? Finally, there is the human capital tied up in the large bureaucracies that have been managing the socialist economy. These people have strong vested interests in the status quo and an interventionist mentality that could thwart the emergence of markets by their over-regulation. Hungary’s 20-year saga of reforming its reforms is a case in point.

Finally, there are the legacies associated with the foreign trade sector. Although foreign trade participation ratios in the socialist countries tend to be low relative to capitalist countries at similar levels of development, the relatively small countries of Eastern Europe are heavily trade-dependent; the Soviet Union is less so. In recent years, these countries have conducted roughly two-thirds of their trade among themselves in a pattern dominated by the exchange of Soviet raw materials for East European manufactures and some food. Such trade has been conducted essentially on a barter basis. Because of the poor salability of all countries’ manufactures in competitive markets, their trade patterns with the West resemble those of Third World countries, which predominantly export raw materials and import manufactures. Some countries have accrued huge hard currency debts to the West. Their currencies are inconvertible and their price structures are largely divorced both from domestic and from foreign scarcity relationships. As a consequence of such pricing, the existing export structures of these countries are weak and distorted in complex ways. Jan Winięcki (1988, p. 141) describes the distortions as the consequence of specializing “without knowing one’s own comparative advantages.” Finally, the relative isolation of domestic producers from direct contact with Western markets has left their managers without experience in selling in competitive international markets. Problems with exportability of their products may prove to be one of the greatest obstacles to integration of the socialist countries into the international order as “normal market economies”—the proclaimed ultimate goal of the current wave of reforms.

References

- Bergson, Abram. “Income Inequality under Soviet Socialism.” *Journal of Economic Literature* 22 (September 1984): 1052–99.

- Bergson, Abram. "Comparative Productivity: The USSR, Eastern Europe, and the West." In *Planning and Performance in Socialist Economies: The USSR and Eastern Europe*, pp. 9–31. Edited by Abram Bergson. Boston: Unwin Hyman, 1989.
- Berliner, Joseph S. *Factory and Manager in the USSR*. Cambridge: Harvard University Press, 1957.
- Central Intelligence Agency. Directorate of Intelligence. *Handbook of Economic Statistics 1990*. Washington, D.C.: Government Printing Office, 1990.
- Gomulka, Stanislaw, and Rostowski, Jacek. "An International Comparison of Material Intensity." *Journal of Comparative Economics* 12 (December 1988): 475–501.
- Granick, David. *Management of the Industrial Firm in the USSR*. New York: Columbia University Press, 1954.
- Granick, David. *Enterprise Guidance in Eastern Europe*. Princeton: Princeton University Press, 1975.
- Greenslade, Rush V., and Schroeder, Gertrude E. "The Bureaucratic Economy." *Soviet Union/Union Sovietique* (Part 2, 1977): 314–29.
- Jeffries, Ian. *The Industrial Enterprise in Eastern Europe*. New York: Praeger Publishers, 1981.
- Kornai, Janos. "The Hungarian Reform Process: Visions, Hopes, and Reality." *Journal of Economic Literature* 24 (December 1986): 1687–1737.
- Marer, Paul. *Dollar GNPs of the U.S.S.R. and Eastern Europe*. Baltimore: Johns Hopkins University Press, 1985.
- Mises, Ludwig von. *Socialism: An Economic and Sociological Analysis*. New York: Macmillan, 1937.
- Mises, Ludwig von. *Planned Chaos*. Irvington-on-Hudson, N.Y.: Foundation for Economic Education, 1947.
- Mises, Ludwig von. "Economic Calculations in the Socialist Commonwealth." In *Collectivist Economic Planning*, pp. 87–130. Edited by F. A. Hayek. New York: Augustus M. Kelley, 1967.
- Mises, Ludwig von. *Nation, State, and Economy*. Translated by Leland B. Yeager. New York: New York University Press, 1983.
- Moroney, John R. "Do Women Earn Less under Capitalism?" *Economic Journal* 89 (September 1979): 601–13.
- Moroney, John R. "Energy Consumption, Capital and Real Output: A Comparison of Market and Planned Economies." *Journal of Comparative Economics* 14 (June 1990): 199–220.
- Morrison, Christian. "Income Distribution in East European and Western Countries." *Journal of Comparative Economics* 8 (June 1984): 121–38.
- Nove, Alec. "Socialism." In *The New Palgrave: A Dictionary of Economics*, vol. 4, pp. 398–407. Edited by John Eatwell, Murray Milgate, and Peter Newman. New York: Macmillan, 1987.
- Pryor, Frederic L. "Growth and Fluctuations of Production in O.E.C.D. and East European Countries." *World Politics* 37 (January 1985): 205–37.
- Schroeder, Gertrude E. "Soviet Living Standards in Comparative Perspective." In *Quality of Life in the Soviet Union*, pp. 13–30. Edited by Horst Herlemann. Boulder, Colo.: Westview Press, 1987.
- Winiecki, Jan. *The Distorted World of Soviet-Type Economies*. Pittsburgh: University of Pittsburgh Press, 1988.