POLITICAL ECONOMY
IN THE CAROLINAS

ECONOMIC CALCULATION IN THE SOCIALIST COMMONWEALTH: APPLYING HUNDRED-YEAR-OLD WISDOM

Paul F. Cwik
Mount Olive University

Where there is no free market, there is no pricing mechanism; without a pricing mechanism, there is no economic calculation.
—Mises (1920, p. 28)

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 (1920, p. 20)

With these sentences, in an essay written one hundred years ago, Ludwig von Mises challenged central planners and started the economic calculation debate while providing wisdom with relevance today. In his 1920 essay, Mises argued that central planning was unworkable and could not achieve the utopian ends sought by governmental leaders. The lesson for today is that the less we use market-determined prices, the less efficient we will be in allocating scarce resources.

I. MISES'S CHALLENGE

When Marx died in 1883, the second and third volumes of his Capital were left incomplete. These volumes were supposed to explain how a communist system would actually operate. Marxists were left with only a broad outline. Mises's claim was that when one tries to solve, in detail, the problem of how a centrally planned economic system would operate, not only is it impossible to succeed, it is impossible to even set up a framework that leads to a solution.[1]

When Mises begins his analysis, the very first sentence draws attention to the definitional difference between a market economy and a centrally planned society: "Under socialism all of the means of production are the property of the community" (Mises 1920, p. 3). The collective

1. While it is true that an economist cannot perfectly model how a free market actually operates, the economist can explain the mechanics of the system of knowledge that flows through prices, which in turn facilitates, the coordination of helps coordinate activities of profit-seeking entrepreneurs with consumers' activities.

nature of the means of production is what stymies the ability of decision makers to rationally allocate scarce productive resources. The core question is how a socialist system could be implemented at the day-to-day level, with the structure of the central authority being of secondary importance. The results of Mises's analysis do not depend on whether the decisions are made by a single dictator, a small committee, or a large bureaucracy. Among socialist thinkers, there was a split in which one side argued that private ownership of consumer goods was to be allowed and the other side said all private property was to be prohibited. Mises showed that focusing on final goods and services sidesteps the fundamental problem of production; his analysis accounts for all of these scenarios. The crux of the problem concerns production, not consumption.[2]

II. THE LYNCHPIN: CALCULATION

All value is subjective. With every exchange, each trading party compares two valuations. If the benefits outweigh the costs, the trade will occur. If they don't, then one side simply walks away. A double coincidence of wants must exist for a trade to occur.

In a world of barter, only a direct exchange can occur. Economic calculation is the direct comparison of the two goods to be traded. However, barter has extremely high transaction costs. With such high costs, a barter system's supply chain cannot become very complex.

Fortunately, the market system has evolved to reduce transaction costs by using a system of indirect exchange—one that uses money. Money is a medium of exchange connecting one person's production with everyone else's production. Transaction costs are reduced to finding people who will trade money for goods. When an economy switches from a barter economy to a money economy, the problem of economic calculation also shifts. No longer does a person directly compare the value of one good with another; instead the person compares the value of the item with the value of money. With this shift, we switch from economic calculation to monetary calculation. Every time a manager looks at profits and losses, he is performing monetary calculation.

Mises argues that "monetary calculation only has meaning within the sphere of economic organization. It is a system whereby the rules of economics may be applied in the disposition of economic goods" (Mises 1920, pp. 15–16). Monetary calculation has limits in that it cannot be applied to noneconomic activity. In fact, Mises extends the limitation of monetary calculation even further: "Any extension of the sphere of monetary calculation causes misunderstanding. It cannot be regarded as constituting a kind of yardstick for the valuation of goods, and cannot be so treated in historical investigations into the development of social relationships; it cannot be used as a criterion of national wealth and income, nor as a means of gauging the value of goods which stand outside the sphere of exchange" (Mises 1920, p. 16).

2. Lange's (1938, p. 87) reply to Mises argued that an equilibrium could be achieved through a system of trial and error and that it could extend to producer's-goods "markets." However, Lange was assuming that output is a predetermined objective. This trial-and-error method simply states that accounting prices can be adjusted to surpluses and shortages in these producer's-goods markets. As we shall see below, it is not simply a question of making more or less of a good, such as steel. The questions to be addressed are of a different type, such as "What kind of steel should be made?" and "What should be most economically efficient use of a particular resource?"

The limitation of monetary calculation stems from the fact that each person values money differently. There is no objective value—even for the same dollar. It is the difference in valuation that prevents us from concluding that markets allocate resources to their highest-valued use (Cordato 2000). The implication is that monetary calculation is an imperfect substitute for economic calculation. Despite this difference, Mises argues that "monetary calculation fulfills all of the requirements of economic calculation" (Mises 1920, p. 16). Thus, while not a perfect substitute for economic calculation, monetary calculation is an adequate proxy.

Monetary calculation allows us to extend judgments of value to higher-order goods, allowing us to compare projects that extend across time. The feedback-and-adjustment process is not confined to the single stage of consumer goods. Profit and loss permeate the entire system, which allows entrepreneurs to compare net present values across a series of dissimilar business proposals.

All economic actors engage in monetary calculation when choosing to produce or consume. The basic tool of monetary calculation is the price. Entrepreneurs' comparison of prices allows them to calculate whether the reward of a project justifies the risk. The use of prices then allows revenue to be recorded and compared to expenses. The feedback mechanism of profit and loss guides entrepreneurs toward equilibria. While there is error in the system, the error will be confined within narrow limits (Mises 1920, p. 27). If an entrepreneur fails to adjust to the changing economic conditions, the business fails and its capital shifts to more capable hands.

Prices communicate knowledge. For prices to convey accurate information to market participants, they must be freely established. If prices were simply assigned by a single person, then these assigned prices would be completely arbitrary and have no meaningful economic content. Without the free interplay of supply and demand, there is no economic information worth using. When we recognize that tastes and preferences are continuously changing and the availability of resources is in constant flux, it is clear that any coordination system must be dynamic. In a dynamic price system, we are continually able to test whether one's actions integrate and coordinate with everyone else's.

III. CENTRAL PLANNERS CANNOT CALCULATE

In a centrally planned system, all the means of production are "owned" by the community. The decision makers do not own the resources that they direct. Without direct, private ownership, opportunity costs are not included in the decision-making process. The manager of the apple orchard does not consider the opportunity cost of the resources employed. Since the workers do not own their labor, the opportunity costs of their labor are never factored into anyone's calculation. In simple economic terms, there are no meaningful supply curves in centrally planned economies. Without supply curves, there are no prices. Without prices, there can be no monetary calculation. Consequently, the system depends upon direct economic calculation. However, as shown above, direct economic calculation is only possible in the very narrow range of instances of barter in which only two goods are directly traded.

So a complex economic order is impossible in a centrally planned society, as there is no guiding mechanism to help make decisions and no feedback mechanism to determine whether the decisions were any good.

To be economically successful, every society must solve the problem of calculation, however no objective technical solutions or objective valuations exist. Determining what is the most economically efficient is not the same as determining what is most technically efficient. Economic efficiencies focus on comparing relative scarcities. Determining the scarcity of something depends upon the two factors of availability and desirability—supply and demand. Without the free interplay of supply and demand, there is no method by which the relative scarcity of goods and services can be established.

Even if we were to assume the government could determine the optimal output of final goods, this would not yield a solution as to how to produce those goods. Suppose that a bridge is to be built. Bridges can be made of out wood, stone, concrete, steel, titanium, or any combination of these resources. Which resources are better used in other projects? Which combination of resources is optimal for building this particular bridge? In the market system, the solution is clear: use the lowest-cost combination of resources that can do the job. The use of any more resources is wasteful, and using any fewer will lead to a collapsed bridge. Furthermore, the market is able to take a further step and answer the question of whether the bridge should be built at all. Central planners simply do not have the tool of monetary calculation at their disposal.

IV. APPLICATION TO NORTH CAROLINA TODAY

In North Carolina, the governor decreed through Executive Order 121[3] that all nonessential businesses must close. Section 2C listed which industries were essential. Any not on that list were deemed nonessential. The problem is that there are no economic tools that can the government can use to determine what is essential.

The North Carolina legislature has adopted resolutions to combat the COVID-19 crisis. House Bill 1043 contained a laundry list of spending items. It appropriates $50 million to purchase medical equipment, $125 million to go to the Golden Leaf Foundation for loans to small companies, $300 million to go to the North Carolina Department of Transportation, $150 million to go to local governments, $20 million to go to other state agencies, and so on (Marchello and Travis 2020). Each choice is noneconomic. Why is $50 million going toward medical equipment and not $49 or $51 million? Why is Golden Leaf to loan money to businesses with fewer than 100 employees? Why not fewer than 99 or 101 employees? The point is that in each instance the choice was capricious. Politicians in Raleigh, North Carolina, or Washington, DC, are not different from any central planner deciding how many tractors to produce in a quarter or how many workers to allocate to collective farms.

There is little doubt that more resources to fight COVID-19 are needed. However, political decisions avoid the specific question of how much we should produce. On March 27, 2020, President Trump responded

3. See NC Exec. Order No. 121 (March 27, 2020), https://files.nc.gov/governor/documents/files/EO121-Stay-at-Home-Order-3.pdf.

to a call for more ventilators. He used his executive authority under the Defense Production Act to order General Motors to start producing ventilators (Wayland 2020). In addition to massive waste and mismanagement, there now seem to be more than enough ventilators (McKay 2020). In North Carolina, hospitals currently (as of May 1, 2020) have 3,309 ventilators, of which 693 are in use (NCDHHS 2020). Similar utilization ratios exist for inpatient hospital beds and ICU beds. Bureaucratic planning systems have no initial targeting mechanism nor any feedback mechanism to determine how to allocate resources. If we make too few ventilators, then people unnecessarily die. If we produce too many ventilators, then we are wasting resources and not producing other vital supplies. Decisions are made without knowledge of relative scarcities. Each politician simply says he needs more. No economic or monetary calculation is performed.

Let us be gracious and suppose that we know the correct amount of ventilators to make. The next question that needs to be addressed is: what is the most efficient method of production? Should General Motors be making ventilators? Is it more economically efficient to have several producers make ventilators? Mises's article tells economists to be humble and admit that we simply do not know and that, without a market price system, no one can know.

Of course, once we know how many ventilators should be made and who should make them, the next question is: how should it be made? What is the most efficient mix of labor and capital? What sort of materials should we use? Which types of plastics and metal should we use? Which process for creating parts is best? And so forth.

Finally, there is the greatest unaddressed problem: should we even make ventilators in the first place? This world is one of amazing substitutes. A substitute is not based upon the physical characteristics of a good; it is based upon the function that a good performs. In our economy, a closed-circuit camera is a potential substitute for a helicopter. How? If I want to know what traffic conditions in a city are like, I can fly a helicopter around and look. Or I can set up a system of closed-circuit cameras and link them to an app. If what I seek is knowledge of where traffic congestion is, helicopters and closed-circuit cameras are substitutes. In this world of substitutes, are there other ways that we could help people besides using ventilators? Are there other treatments that achieve the same effect but do so in radically different ways? Such questions need to be answered to have an efficient economic system. However, not only are these questions unanswered, they are never even brought up for discussion. While describing how a spontaneous order could solve a specific crisis, such as COVID-19, is impossible, it is not hard to demonstrate that the Centers for Disease Control and Prevention and the Food and Drug Administration hindered testing and worsened the crisis (Bailey et al. 2020).

V. CONCLUSION

The Soviet Union persisted for seventy-four years because it was an island of socialism in a sea of markets. It was able to cheat by using Western prices to plan its economy. It had limited success.[4] Mises pointed out that

4. Maltsev (2009) argues that the Soviet economy was only 4 percent of the size of the US economy.

the problem in a centrally planned economy is its inability to use monetary calculation. When monetary calculation is not available, direct economic calculation is necessary. However, Mises's essay demonstrates that it is impossible for a complex economic system to use direct economic calculation. Thus, Mises was able to demonstrate that a centrally planned economic system is impossible, even on paper.

The lesson for economists today is that economic calculation is no less important today than it was one hundred years ago. Without private property in the means of production, there are no supply curves. Without supply curves, there are no means by which prices can be generated. Without prices, there is no accounting mechanism to check monetary calculation. Without monetary calculation, there is no way to gauge the relative scarcity of resources. Without knowing the relative scarcity of resources, we cannot rationally allocate scarce resources among competing future ends. The conclusion is that when we turn to government to solve crises, we will inevitably misallocate and waste resources.

The single most important tool at our disposal is the price system. When we allow prices to do their jobs and accurately reflect relative scarcities, entrepreneurs have the greatest chance at solving our economic crises.

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