

Who Says Small Is Beautiful?

The notion that natural forces now are impacting on the U.S. economy such that the rate of economic growth will be limited in the future has become widely popular among vocal elements during the past few years. In large part this notion is based on the assumption that, if allowed to, the population will use essential resources faster than they will be replenished or before substitutes will have been found. This fear is not new to this generation. In the nineteenth century, Thomas Malthus became well known for his forecast that the population would increase much more rapidly than could the food supply, with mass starvation being probable. Also in that century, many feared that the dwindling supply of whales would lead to a shortage of whale oil for use in lamps.

The recent concern has been promoted by many books and reports (given abundant publicity by the news media) that have focused on shortages of energy reserves and alleged dwindling of natural resource supplies. Among the early and most widely publicized of these were a report by the Club of Rome, "The Limits to Growth," and a book by E. F. Schumacher, *Small Is Beautiful*, both published in 1973. In this article we analyze some of Mr. Schumacher's notions, taking them as representative of the types of notions underpinning the view that growth is bad.

The Evil Capitalistic System

Fundamental to *Small Is Beautiful* is the idea that the free-enterprise, or capitalistic, system is the cause of most social problems, including poverty, crime, and war. According to Mr. Schumacher, "it is widely held that everybody is born good; if one turns into a criminal or an exploiter, this is the fault of 'the system.'" He also asserts that "these [profit-motive desires] are the real causes of war, and it is chimerical to try to lay the foundations of peace without removing them first. It is doubly chimerical to build peace on economic foundations which, in turn, rest on the systematic cultivation of greed and envy, the very forces which drive men into conflict." To Mr. Schumacher the system that fosters this "greed and envy" is the free-enterprise system. It, therefore, is responsible for all evil.

In this day of national self-castigation, many Americans apparently have accepted the notion that our economic system promotes conflict, even though the contrary can be demonstrated. In *Research Reports* for February 28, 1977, we described why free competition is not analogous to war, but is the very opposite, voluntary cooperation. The free-enterprise system encourages people to cooperate freely with each other. Each party to a voluntary

Note: This is a review of *Small Is Beautiful* by E. F. Schumacher, published by Harper & Row, Publishers, New York, New York, 1973. We earlier had thought this book so frivolous as to not merit comment in these reports. However, because so much favorable publicity has been given to the views represented in this book, we concluded that this book warranted a review.

transaction must believe the transaction to be in his best interests or he would not enter into it. This would not appear to be evil, as Mr. Schumacher alleges it is.

One could more reasonably argue that the alternative systems of socialism and communism are rooted in conflict. The foundation of those systems is the use of the force of "law" to take from some for the benefit of others. Is it right for the State to take forcibly from one person what he has created and give it to another because the latter "needs" it? Is this not national slavery, with the government bureaucrats and officeholders determining who benefits from the slaves' excess product? Most persons probably agree with the assertion that morality can not be legislated, but Mr. Schumacher evidently would not.

The author also is concerned that the free-enterprise system focuses on the material aspects of life and does nothing to improve "the quality of life." He says that all activities of man can be classified as either economic or uneconomic, that is, either they are "profitable" or they are not. Those activities that he believes would improve the quality of life are, according to him, uneconomic. Unfortunately, he states, "if an activity has been branded as uneconomic, its right to existence is not merely questioned but energetically denied." However, Mr. Schumacher fails to explain why many activities that are uneconomic, in a bookkeeping sense, flourish in the United States.

Americans freely give money and donate their time to religious groups, charitable organizations, civic groups, the arts, etc. To do so generally is not "profitable" and hardly is considered "shameful," as the author implies.

Activities that can be considered "not profitable" are those that a person is forced to undertake. In most instances that a person voluntarily does one thing rather than another, he does so for a greater "profit," although that "profit" often is not money or a tangible good. For example, one who contributes money to a charity rather than purchase a good presumably does so because he prefers the "profit" of having the satisfaction of helping others to that provided by a material good. However, when a person is forced to do something that he voluntarily would not do, that act is uneconomic, no matter what the result. Nearly every working American is required to "contribute" to the Social Security system ostensibly in order to ensure that retired persons do not live in poverty. Even if one receives some benefit when he retires, the act of "contributing" was uneconomic if he would have used his funds in some other way were he free to do so. Inasmuch as all persons have different preferences, who is qualified to determine for another responsible adult what would most benefit him?

According to Mr. Schumacher, the free-enterprise system and the advances in technology that it has promoted have created three major contemporary prob-

lems: (1) the misuse of nonrenewable resources, (2) the misuse of land, and (3) the dehumanization of work. Each of these is analyzed below.

Nonrenewable Resources

Mr. Schumacher asserts that the free-enterprise system has failed to solve "the problem of production." That problem, as he sees it, is the use of nonrenewable resources without regard for the future.* Evidently he believes that, because of the greed associated with the profit motive, businessmen use nonrenewable resources with little or no thought that someday such resources will be depleted and unavailable to future generations. He sees capitalism stripping the earth of the resources mankind needs for survival.

Although nonrenewable resources will not last forever, the assertion that man has approached the limits of these resources is meaningless except in the context of a static socio-economic order. New supplies of now widely used nonrenewable resources and/or alternative resources most probably will be discovered provided that prices are free to reflect any increasing relative scarcity. Moreover, if prices are free for such purposes, as they rise they will provide the necessary incentive to conserve at the appropriate time.

The fundamental question is, Should we conserve current resources for future use or should we use these resources that are suitable for current technology? The conclusion that we should conserve these resources implies that the current resources, technology, and social choices will be pertinent to future generations. Perhaps many persons nostalgically long for the simple economic times, but we would guess that most Americans would thank our forefathers for not locking the Nation into an economic straitjacket. In the past, market forces promoted technological advances and new discoveries that made previously unknown or useless resources highly important and valuable. Is there now adequate evidence that this demonstrated successful arrangement for coping with the problem of nonrenewable resources no longer can be relied on?

Mr. Schumacher and those with similar views suggest that the historical evidence should be disregarded, that the future of mankind should be risked on their conjectures, and that strict conservation measures are essential. We reject those suggestions; we should prefer to risk the future on what has proven successful in the past.

Emphasis should be placed on utilizing the ingenuity and energy of man through market incentives to develop new, and probably better, sources of energy or methods of recovering resources. Already energy sources are being developed that either generate their own fuel (the breeder reactors) or are unlimited in supply (solar power). If energy prices are free to reflect comparative costs and values, such substitutes for nonrenewable resources will be phased in when appropriate.

Misuse of Land

Mr. Schumacher states, "In our time, the main danger to the soil, and therewith not only to agriculture but to civilisation [sic] as a whole, stems from the townsman's determination to apply to agriculture the principles of industry." He is concerned that the free-enterprise system applied to agriculture has reduced the farmer to only "a

* Nonrenewable resources are those that can not be replenished, such as coal, oil, and most other minerals. Once these are used, they are gone forever. In contrast, a renewable resource is one that can be replenished, such as lumber.

producer who must cut his costs and raise his efficiency by every possible device, even if he thereby destroys — for man-as-consumer — the health of the soil and the beauty of the landscape."

A moment's reflection reveals the fallacy of this thinking. Man's "greed" for "profits" would require that he preserve the health of the soil, not destroy it. A farmer does not work a plot of land for only a few years and then, after he has taken from it all that he can, move on to another plot. The amount of land highly suitable for farming always has been limited. The profit motive has encouraged farmers to improve land for farming by irrigating, rotating crops, terracing hillsides, and so forth. If the farmer hopes to continue to make a profit, he must ensure that his capital (land) is not depleted. The profit motive, rather than fostering the exploitation of the farm land, ensures that such land will be well maintained. Where has the farmer and farm land been more productive than in America?

Not only are Mr. Schumacher's assertions about the misuse of land unwarranted, his proposed solution would do much to ensure widespread starvation. He declared that "man's management of the land must be primarily orientated towards three goals — health, beauty, and permanence. The fourth goal — the only one accepted by the experts — productivity, then will be attained almost as a by-product." If land management were totally directed toward those three goals, productivity would not be enhanced; it would be eliminated. What could be more healthy for the land, more beautiful to see, or more permanent than to leave land untended, to grow into wonderful forests and meadows?

For a moment, let us assume that, as Mr. Schumacher asserts, land is being ruined by current practices. In a market-oriented, free-pricing economy, what probably would happen? As land becomes less suitable for farming and recreation, the supplies of those items will decrease, their prices will rise, and a large incentive to preserve and reclaim the land will be created. This will not be an overnight change; it will evolve gradually, perhaps noticed by only a few analysts. The problem would create its own solution. What makes the market system so efficient is that it contains its own self-correcting mechanism.

Mr. Schumacher, in defense of his "quality of life" position, quoted the biblical saying, "Man does not live by bread alone." Without bread, man will not live.

Dehumanized Work

Nothing about the free-enterprise system destines rapid technological advances, specialization and the division of labor. These have accompanied the free-enterprise system because they have enabled man to produce things with less effort, freeing his time for other pursuits. However, according to Mr. Schumacher, this system has resulted in the dehumanization of work. He states, "What becomes of man if the process of production 'takes away from work any hint of humanity, making of it a merely mechanical activity'? The worker himself is turned into a perversion of a free being." Although he raises this point in the form of a question, he reveals that he believes this has happened and needs to be corrected.

For most of recorded history, most persons had to work from sunup to sundown merely to survive. Perhaps the work (usually farming or fishing) had a "hint of humanity" and promoted close family and local ties, but was man free from drudgery in those circumstances? He had little time for anything other than working to sustain himself.

However, the division of labor, improved technology, and free economic choices have reduced the number of hours that a person needs to work for the same amount of goods. The industrial revolution and free enterprise have enabled the vast majority of persons to choose among a number of occupations (including farming) rather than being forced to engage in subsistence farming simply to eat.

On the basis of his assumption that technology has created a severe problem of dehumanizing work, Mr. Schumacher recommends three things for its solution (1) limit the size of companies, (2) reduce technology to that "with a human face," and (3) create "what is now the rarest privilege, the opportunity of working usefully, creatively, with his own hands and brains, in his own time, at his own pace — and with excellent tools." He does not mention how he or anyone else can be so gifted as to know what the proper size of companies should be, what technology has a "human face," what tools are "excellent," or how such tools might be produced and distributed if no one "liked" the task of producing them. He arrogantly presumes to know that each of us will enjoy this old level of work, even if we must work longer hours for less. He asserts that "people who work in this way do not know the difference between work and leisure. Unless they sleep or eat or occasionally choose to do nothing at all, they are always agreeably, productively engaged."

Perhaps Mr. Schumacher is somewhat accurate in his assessment that the division of labor has gone too far; the speed with which many have embraced his types of views suggests so. If this is the situation, the self-adjustment processes of the free-enterprise system already are functioning to alter trends. He and those like him forsaking the modern life to return to nature and quieter activities are living evidence of this. If more and more others come to believe likewise, the free-enterprise system will adapt to the changing preferences.

Apparently this is not adequate in Mr. Schumacher's view. He anoints himself qualified to tell others what is best for them. Please, Mr. Schumacher and followers, permit us the freedom to decide for ourselves those things that we

prefer, as we allow you to pursue your preferences. Some of us may like things as they are.

Final Comment

Small Is Beautiful argues the case for limiting economic growth. However, nowhere in the book does Mr. Schumacher provide any evidence supporting his assertions. Instead, he provides "beliefs" of "experts" and *exploratory calculations* ostensibly suggesting probable future trends. These are nothing but guesses based on the author's assumptions and assertions. History refutes most of them. Moreover, Mr. Schumacher at times contradicts himself when "proving" different views. He also makes abundant unwarranted "if-then" clauses.

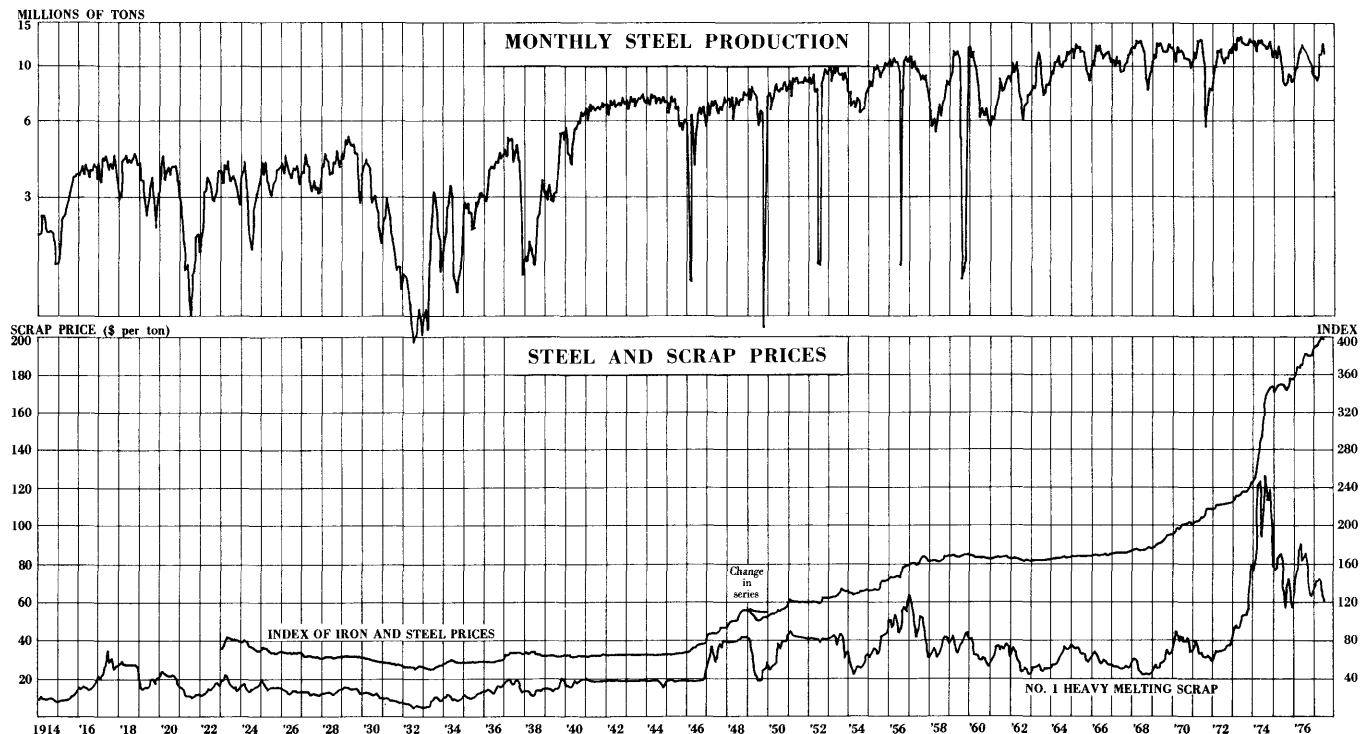
Our problem with reviewing this book and analyzing views like those presented in it is not a lack of assertions with which to take issue; it is the difficulty of convincing ourselves that they merit serious attention.

BUSINESS

STEEL PRODUCTION, USES, AND PRICES

During the first 6 months of 1977, domestic steel manufacturers produced 63.6 million tons of "raw" steel (ingots, castings, and other first-stage forms of steel). This volume was 4.0 percent less than that during the corresponding period of 1976 and 15.9 percent less than the record volume produced during the first 6 months of 1973.

As the accompanying chart shows, raw steel production reached a cyclical trough during the second half of 1975. Such production increased markedly during early 1976 but subsequently contracted. The latter contraction reflected the "pause" in the economic recovery last fall, but its magnitude apparently was increased by severe adverse weather during the winter. Raw steel production during January and February was 9.1 and 8.9 million tons, respectively, which were the smallest volumes produced during those months since 1963. Production increased markedly during March, to 11.0 million tons, presumably reflecting more normal supplies of fuel and



energy then. Production during April, May, and June averaged 11.5 million tons, but output during those months may have included some "catch up" production from the mid-winter months.

Shipments of steel mill products by domestic producers totaled about 47.4 million tons during the first 6 months of 1977. This volume was about 0.5 million tons, or 1.1 percent, more than that during the corresponding year-earlier period. Industry analysts recently forecast shipments of 23.9 million tons during the third quarter, 25.5 million tons during the final quarter of 1977, and a total of about 96 million tons for 1977. This volume would be about 8 percent more than total 1976 shipments but somewhat less than the amount industry spokesmen forecast earlier this year.

Even the reduced estimate of domestic shipments might prove optimistic, for this estimate appears to reflect the assumption of increased orders from the capital equipment and heavy construction industries during the next 6 months. Vigorous expansion of these industries during the coming months is not highly probable at this time, although it is possible. Moreover, imports of steel mill products totaled about 1.8 million tons during May, which was the largest total during any month since December 1971 and a record volume for the month of May. Perhaps May's import total was an aberration. However, foreign steel producers reportedly now are underpricing domestic mills; therefore, steel imports might remain comparatively large. Increased imports presumably would tend to decrease domestic shipments.

U.S. steel producers have sought Government actions against foreign predatory pricing and related practices, but Mr. Robert Strauss, the chief trade negotiator for the United States, repeatedly has opposed such "trade curbs." The availability of relatively inexpensive foreign steel tends to restrain domestic steel prices. Government officials probably prefer this form of restraint to jawboning confrontations with steel producers over pricing.

As reported by the Bureau of Labor Statistics, the index of iron and steel prices increased at a compound annual rate of 8.4 percent during the 6 months ended in May, to 399.0 (1947-49=100). Such prices now are about 4 times those 30 years earlier and about 2.3 times those 10 years earlier. As the accompanying chart indicates, recent increases in steel prices have been relatively large.

Although recent steel price increases have enabled steel producers to offset higher materials (including energy) prices and wage rates, that steel producers currently are recovering their capital costs is questionable. Reportedly, existing steel-making facilities are carried on steel producers' books at \$160 per ton of annual capacity. Much of this existing capacity was purchased many years ago. Today the estimated cost of new, "greenfield" steel-making capacity (entirely new facilities, not additions or modifications to existing facilities) is about \$1,400 per ton. If the estimates are "in the ballpark," the steel industry will have substantial financial difficulty replacing existing capacity, let alone enlarging it, unless steel prices increase markedly. Foreign competition and Government sensitivity about steel price increases probably will prevent steel price increases adequate to cover anything but increased current costs.

The composite price of No. 1 heavy melting steel scrap, as reported in *Iron Age*, averaged \$61.92 per long ton during June. This was the lowest monthly average price since November 1975. Some analysts believe that this series leads changes in "raw" steel production, but this relation-

ship is not highly consistent. Nevertheless, that the trend of steel scrap prices is downward suggests that mills are not bidding aggressively to acquire scrap (steel scrap is re-melted in the steel-making process) for use during the next few months.

The large increase in steel production during the second quarter of 1977 probably will not be repeated during the third quarter. Such production more probably will decrease somewhat during the rest of 1977, inasmuch as the industry is vulnerable to lower foreign prices and to any continuing weakness in capital goods industries.

STATISTICAL INDICATORS

No new data were received for any of the leading or coincident indicators. Sixty-seven percent of the former group and 100 percent of the latter group are appraised as expanding cyclically.

Among the lagging indicators, the ratio of consumer installment debt to personal income increased during May and the inverted average duration of unemployment increased during June. These data extended the cyclical expansions of those series. All six of the primary lagging series are so expanding.

That eight of the twelve primary leading indicators apparently are expanding cyclically and only one apparently is contracting cyclically suggests that general business activity will continue to expand during the next few months.

SUPPLY

INDUSTRIAL PRODUCTION

Production of steel, automobiles, and electric power (1) in the 1- and 4-week periods ended on the indicated dates in the current year and (2) in the corresponding periods of earlier years was as follows:

	1972	1973	1974	1975	1976	1977
<i>Steel</i>						
Ingots (million tons)						
1 week: July 9	2.43	2.79	2.78	1.91	2.59	2.39
4 weeks: July 9	9.98	11.50	11.23	7.87	10.63	10.14
<i>Automobiles</i>						
Vehicles (thousands)						
1 week: July 9	101	150	115	140	134	268p
4 weeks: July 9	634	795	597	556	670	920p
<i>Electric Power</i>						
Kilowatt-hours (billions)						
1 week: July 9	31.6	40.3	40.5	38.8	39.0	44.0
4 weeks: July 9	134.5	153.3	149.3	155.7	162.6	173.5
	Percent change from 4 weeks a year earlier: +6.7					
	p Preliminary.					

PRICES

COMMODITIES PRICES

Index	1976		1977	
	July 5	June 27	July 5	July 5
Spot-market, 22 commodities*	555	538	539	
Commodity-futures	783	760	748	
Steel-scrap	\$89.50	\$61.50	\$61.50	
	July 15	July 7	July 14	
Gold	\$121.40	\$141.45	\$143.85	

*For the preceding Tuesday.

Note: The indexes are, respectively, those of the U.S. Bureau of Labor Statistics, Dow-Jones, and *Iron Age*. The spot-market and futures indexes are converted so that their August 1939 daily averages equal 100. The steel-scrap index is a composite price for No. 1 heavy melting scrap. The gold price is the final fixing in London.

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