

Engineering and Economics

by WAYNE S. BERRY

THE law of supply and demand is a natural law and if men make laws that are contrary to this law the results will be harmful. The economic laws may not be as clearly understood as the law of gravity or other natural laws. Nevertheless economic laws operate the same as any other laws of science.

We in the engineering profession know that we could not accomplish much if our terms did not have exact definitions. A great step toward straightening out the misunderstanding in economic discussions could be gained if an international congress were set up to define economic terms just as such a congress undertook to define scientific terms. The words volt, ampere, etc. now have exact definitions and their meaning is understood by engineers and scientists in every country.

Wealth is an important word in economics and the best definition I have come across is: "All material things produced by labor for the satisfaction of human desires." It should be understood that these material things will have exchange value, and that wealth is produced by man as he makes use of the natural resources to suit his needs.

Capital, which is part of wealth, consists of the tools that enable man to produce wealth in abundance. The development and manufacture of capital enables him to produce wealth in large amounts with less labor. It is this automation that perplexes the United States and many other countries.

Engineers are well conditioned to analyze economic problems, including the ever present one of widespread poverty. Before this can be overcome however there is one injustice in our economic system that must be clearly understood—that is the unfair distri-

bution of the economic rent of land and natural resources.

Land, another important economic factor, gains its importance and value largely because of its location with respect to the density of population, hence the term land value. This value is further enhanced by such services rendered by the community as police protection, educational opportunities, highway facilities and utilities. In these services, especially in providing transportation, water systems, bridges and tunnels, the engineer has often been the key man. In the development of natural resources he has also made great strides, and each invention by engineers which is utilized, increases the value of the land in every community, just as the invention of the oil burner and automobile increases the value of oil in the good earth that God has given us.

This value which increases because of what the community has done does not properly belong to the individual owner of the land, just as the oil and other natural resources deep in the earth can hardly be said to belong to the owners of the surface land. They should be a part of the inheritance of every living person. Unfair valuation and tax assessments must be corrected if we are ever to overcome poverty on a national scale.

How can this be done? Surely not by communism, which would make us all slaves of the state. Instead let's consider a modern assessment reform which would encourage individual freedom and private enterprise by lowering the taxes which now inhibit man's achievements and creative efforts, so necessary to progress. This method, which levies taxes lightly on build-

ings, heavier on land, has been successful wherever it has been tried. Properly administered it reduces real estate taxes on a house and all buildings, all excise taxes, sales taxes and income taxes. It should be noted that any tax except the one on land value is a tax on man's labor and is unfair, particularly to engineers, who are committed to the improvement of living conditions. What is mainly required for a wholesome tax system is not a penalty on those who create wealth, but incentives for those who can improve or expand their holdings and offer much needed employment to others.

Our engineers know how to build good buildings, but private enterprise will not invest in any project which does not give an adequate return. Therefore the government attempts to build housing to supplement the slums, but it cannot keep up with the ever growing blight. The owner of slum land has one of the best investments in

the world. He puts very little in and takes out a great deal. That is why land in slum areas is seldom for sale. Our present real estate tax laws have fostered speculation in land and are largely responsible for the decay in cities. The urgently needed action therefore is incentive taxation.

Until we face up to the natural laws of economics we will continue to have crime and disorder in the streets, and strife between labor and management. Engineers who study economics will recognize the logic of the natural laws governing production and distribution. They will learn that they cannot produce wealth unless they have access to land and natural resources. Production is the mother of wages, and the fruit of a man's labor belongs to those who produce the wealth.

These are simple precepts but they seem to have been abandoned, and that betrayal of natural law and justice is the basic cause of our poverty today.



THE MAGIC OF BELIEVING

Jack Woerfel, in his column in *The Detroit News* on November 30th, confessed to former incredulity regarding acceptance of Henry George's views when he said he once thought the theory of land value taxation sounded "pretty weird." The property tax proposal by C. Lowell Harriss in *The MGIC Newsletter* (see page 1) seems to have given him courage to say, "I have never heard any responsible tax authority blast the theory."

Edward E. Edwards, a consulting editor on *MGIC*, writing in the November *MGIC Newsletter*, expressed surprise at Professor Harriss' endorsement in these words: "A few years ago not many economists of Lowell Harriss' stature would have risked their reputation by advocating higher taxes on land. They would have been afraid of being categorized as disciples of Henry George, an American frontier economist whose panacea for our various ills was a single tax on land."

Professor Edwards noted that "the present argument for higher land taxes recognizes the desirability of other taxes. The financing of our cities requires a variety of taxes; in fact, the failure of cities to develop other sources of revenue is the main reason why the property tax as now administered is so bad."

Commenting on Dr. Harriss' article he said, "the property tax, which may have been an ideal one in an earlier period, needs revision, not just in administration but in concept. Tax reform at the federal level seems to be getting widespread support. Reform should be just as popular at state and local levels."

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