

Aerospace industry confirms EIR's depreciation index

by David Goldman

Two issues ago, *EIR* presented the results of a computer simulation of the prospects for the American economy conducted with the LaRouche-Riemann model. The study employed a new depreciation index prepared by *EIR* economics staff, which yielded the disturbing conclusion that net fixed capital investment had been negative in the United States for the entire period since the 1974-1975 recession, reaching a figure of negative \$50 billion by 1979. That is, the amount of productive capacity lost to the economy through obsolescence, physical deterioration through aging, or capacity shutdowns not counterbalanced by construction of new capacity, exceeded total new capital investment in the economy.

The issue of what constitutes depreciation is fundamental both to economic analysis and planning, since it determines the tax-allowances for depreciation used by the Internal Revenue Service. *EIR* adopted as its criteria the level of capital replacement required to maintain a productivity growth rate registered during periods of acceptable economic performance, and took the period 1960-1969 as the base period. The rate of growth of net capital stocks declines sharply in 1970, according to Commerce Department data, corresponding to a secular decline in the rate of productivity growth. The earlier period shows an average 3 percent per annum rise in productivity, against a 2.3 percent average during the 1970s (and a continuously falling trend line).

EIR studies found that the divergence between the "optimal" rate of growth of net capital stocks between 1960-1969 and the subsequent lower rate of growth corresponded with great precision to available estimates of obsolescence of plant and equipment due to availability of new technologies. For example, the McGraw-Hill survey, the only such empirical sample currently available, shows that industrial managers believed that about \$80 billion of their plant was outmoded in 1976. In that year, the \$80 billion figure corresponds precisely to the divergence between optimal and actual net capital stocks. However, in 1978, the two numbers diverge sharply; the McGraw Hill number fell back to \$60 billion plus the replacement cost of capacity lost permanently to the

system, is \$100 billion, the same number *EIR* arrived at by the optimizing method.

EIR's approach is confirmed by a previous study executed by Dr. Klaus P. Heiss for the Aerospace Industries Association of America, Inc. (*Aerospace Capital Formation: Impact of Inflation and Depreciation*, Aerospace Industries Association of America, April 1976.) Adjusting the nominal replacement cost of aging capacity—the cost of the productive asset at time of purchase—by the inflation in capital goods prices during the life of the asset, Heiss established that the commerce Department's nominal depreciation approach understated depreciation by \$20.6 billion in 1971 and by \$54.1 billion in 1975. By this method, he calculated that net real investment in the economy was negative \$10 billion in 1975.

This methodology is coherent with *EIR's*, for the self-evident reason that a decrease in investment in productive areas coincident with a comparable increase in investment in non-goods-producing areas of the economy will generate a higher rate of inflation. Therefore, to the extent that the rate of growth of net capital stocks falls, inflation will increase, and the replacement cost of capital goods will rise. Heiss found that the divergence between real and nominal depreciation came to be a serious problem after 1969, the same conclusion *EIR* arrived at.

Both these methods are in sharp contradistinction to current approaches in preparation by the United States Treasury to adjust depreciation figures currently issued by the Treasury, and arrive at what a Treasury working draft calls a publicly defensible index. The approach outlined relies on such *subjective* views of depreciation requirements as the resale price of existing capital equipment, and manufacturers' own estimates of future capital requirements. This ignores the effect of adverse economic conditions, and doubly adverse conditions for capital investment, on the perceptions of corporations. Both *EIR's* method and the Aerospace Association's method, by contrast, look at depreciation for the purpose of establishing investment criteria for the economy's underlying productivity.