TheoDORe W. SCHuLTZ

Theodore W. Schultz (1902–1998) grew up in Arlington, South Dakota, and pursued his undergraduate education at South Dakota State University. After receiving his Ph.D. from the University of Wisconsin in 1930, he joined the faculty of Iowa State. In 1943 he took a position as professor of economics at the University of Chicago, where he served as department chair from 1946 until 1961. He continued his work at Chicago until his retirement. His thirteen books and more than 250 articles and papers dealt mainly with agricultural economics, economic growth and development, and human capital. In 1979 he was awarded the Nobel Prize in economics for these contributions.

In the early 1960s Schultz initiated what was to become the human capital revolution in economic thought.1 Human capital consists of the accumulation of all prior investments in education, on-the-job training, health, migration, and other factors that increase individual productivity and, therefore, earnings. Laborers have become capitalists, said Schultz, through the acquisition of knowledge and skills that have economic value:

This knowledge and skill are in great part the product of investment and, combined with other human investment, predominantly account for the productive superiority of the technically advanced countries. To omit them in studying economic growth is like trying to explain Soviet ideology without Marx.2

Schultz asserted that investment in human capital helps us understand “three major perplexing questions closely connected with the riddle of economic growth.”

First, consider the long-period behavior of the capital-income ratio. We were taught that a country which amassed more reproducible capital relative to its land and labor would employ such capital in greater “depth” because of its growing abundance and cheapness. But apparently this is not what happens. On the contrary, the estimates now available show that less of such capital tends to be employed relative to income as economic growth proceeds. Are we to infer that the ratio of capital to income has no relevance in explaining either poverty or opulence? Or that a rise of this ratio is not a prerequisite to economic growth? . . . For my purpose all that needs to be said is that these estimates of capital-income ratios refer to only a part of all capital. They

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1 Recall that this concept had its origins in Adam Smith’s Wealth of Nations. Von Thünen and Fisher also included human capital in their definitions of economic wealth.

exclude in particular, and most unfortunately, any human capital. Yet human capital has surely been increasing at a rate substantially greater than reproducible (nonhuman) capital. We cannot, therefore, infer from these estimates that the stock of all capital has been decreasing relative to income.3

The second perplexing question, said Schultz, is why national income has risen faster than the combined amount of land, person-hours worked, and the stock of physical capital. The explanation lies in returns to scale and to the improved quality of inputs, particularly the improvements in the human capacity to produce goods and services.

A small step takes us from these two puzzles raised by existing estimates to a third which brings us to the heart of the matter, namely, the essentially unexplained large increase in real earnings of workers. Can this be a windfall? Or a quasirent pending the adjustment of labor supply? Or a pure rent reflecting the fixed amount of labor? It seems far more reasonable that it represents rather a return to the investment that has been made in human beings.4

What are the implications of human capital theory for assistance to developing nations? asked Schultz. He answered that we have perpetuated a misleading development doctrine, assigning primary importance to the formation of physical capital. New agencies are being developed to transfer funds so that developing nations can purchase or build steel mills and power plants:

This one-sided effort is under way in spite of the fact that the knowledge and skills required to take on and use efficiently the superior techniques of production, the most valuable resource we could make available to them, is in short supply in these underdeveloped countries. Some growth of course can be had from the increase in more conventional capital even though the labor that is available is lacking both in skill and knowledge. But the rate of growth will be seriously limited. It simply is not possible to have the fruits of a modern agriculture and the abundance of modern industry without making large investments in human beings.5

The fact that Schultz’s perspective is now a common tenet of development economics attests to the significance of his insight. Moreover, as discussed in Chapter 24, Schultz’s emphasis on human capital ultimately resulted in the application of the idea to a far wider range of economic analysis. Today human capital theory is an orthodox portion of the core of labor economics.

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3 Schultz, “Investment,” 5.