Overview Of Theories Of Economic Growth By Solow, Kaldor, And Kutzens

Inspired by the works of Harrod and Domar on their model of economic growth, Solow (1956) argues that the long-term instability of this growth is based on an unreliable assumption of the presence of fixed proportions in the production. As his contribution to the theory of economic growth, Solow introduces three viable production functions: (1) a Harrod-Domar function in which labour cannot be substituted for capital, (2) the Cobb-Douglass production function as well as (3) a function describing constant returns-to-scale. Subsequently, Robert M. Solow warily suggests an over-simplified economic growth model whose underlying characteristics are fewer intransigent assumptions, such as the allowance of technological expansion and the exclusion of certain concepts including uncertainty and rigid wages. Solow concludes by acknowledging the lack of reality of his aforementioned model and by leaving room for thought regarding the importance that the discussed factors have on economic growth.

Simon Kuznets (1955) approaches the relationship between economic growth and income inequality. He analyses the trend of income inequality in more economically developed countries, pointing out that that this trend is tied with increases in real income per capita. Then, he describes two factors leading to a higher income inequality. The first one is the accumulation of savings within the high-income groups, which increases the inequality of saving rates, which over time deepens even more the gap between the high-earning groups and the rest of the population. The second factor is the industrial structure of the income concentration, which is based on infrastructural and technological growth, allowing economies to prosper and to move away from agricultural activities. Kuznets follows up by suggesting some other factors susceptible to lower income inequality. Overall, an underlying theme of uncertainty regarding the accuracy of these factors as well as the population’s decisions dominates his conjectures and conclusions. Kuznets comes to the conclusion that repeating the economic growth patterns of developed economies to the economies of less developed countries is risky and could lead to the opposite desired effect: yet more income inequality.

On the other hand, Nicholas Kaldor (1957) approaches the topic of economic growth by taking into account take into account the influence of technological invention to the efficiency of labor by incorporating it to the production function. The central point of Kaldor’s model of economic growth is based on two assumptions: the working population remaining constant and population growth. Based on the former condition, Kaldor came into conclusion that the rate of which an economy grows at the same rate as the growth of output per capital. Under the latter condition, the equilibrium of growth depends on the maximum rate of population increase and the rate of technical progress. Kaldor discovered that the long-run equilibrium rate of growth of income is dependent of the technical progress function instead of the savings and investment functions. This finding can be applied to Harrod’s “natural” and “warranted” rate in which they should be equal at the equilibrium rate of growth. His second preposition is that the rate of population growth must equal to the rate of growth of income. The reason being, it has to let output per head and capital per head to remain constant over time.

To conclude, the aforementioned theories of economic growth proposed by Solow, Kaldor, and Kutzens described some variables that are still relevant to the problem of maximizing economic

growth that nations are still facing today. Though approaching the same topic in general, Solow approached it by introducing three viable production function. Similarly, Kaldor also introduced a new production function in which the technological progress plays a great importance in the development of his theory. In contrary, instead of approaching it algebraically, Kuznets approached it in a very different way by looking into how economic growth and income inequality interrelates. Furthermore, both Solow and Kutzens set the Harrod-Domar model as their guideline to build a new hypothesis in particular the “full employment” idea of an economy. Lastly, Kutzens and Solow did a comparative analysis between different income groups.

Bibliography

1. Kaldor, N. (1957). A Model of Economic Growth. The Economic Journal. 67(268), 591-624.
2. Kuznets, S. (1955). Economic Growth and Income Inequality. American Economic Review, 45(1), 1-28.
3. Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. Quarterly Journal of Economics, 70(1), 65-94