ADAM SMITH

Adam Smith's theory of growth has not received as much attention as his theory of value and distribution. The fact, however, is that he does provide an internally consistent dynamic model. Irma Adelman rightly asserts, "The main strands of his theory—the investigation of capital accumulation, population growth and labour productivity — still underlie all current treatments of the problem. And many of his policy recommendations, such as his plea in favour of free trade and his stand against planned economic development, are still as controversial now as when they were first made."[1]

The Production Function

Since Adam Smith recognised the existence of three factors of production, namely, labour, capital and land, his production function may be expressed as

$$Y = f(K, L, N)$$

where K denotes stock of capital, L represents labour force and N stands for land. If one chooses to be generous, then land may be interpreted to mean "supply of known and economically useful resources."

Adam Smith has not assumed diminishing marginal productivity. However, the production function is subject to increasing returns to scale. **In his opinion, with the passage of time the size of market will expand and in turn result in both internal and external economies which will eventually lower down the real cost of production.** Improvement in production techniques together with greater degree of division of labour was expected to realise the economies of scale in production. Adam Smith asserted that division of labour did not depend merely on technological feasibility; it greatly depended on the extent of the market as well. As far as the size of market is concerned, it depends on the available capital stock and the institutional restrictions placed upon both domestic and international trade. Thus, **accumulation of capital is a precondition** to **increasing division of labour.**[2] The regulatory measures against trade have a tendency to restrict the size of market which obviously limits the division of labour.[3]

Supply of Land and the Change in Institutions

In Smith's theory, two factors, namely, the supply of land and the change in institutions are comparatively less important and one can dismiss them briefly. Though Smith nowhere explicitly stated that the supply of land (generously we may say natural resources) is fixed for any country, he nevertheless implied this when he wrote: "The rent of land, therefore, considered as the price paid for the use of land, is naturally a monopoly price." As far as the institutions are concerned, he thought that the change in them is determined exogenously, and therefore its time path could be determined independent of other variables in the system. To Adam Smith institutional variable is quite important for he asserts that free trade and *laissez faire* provide a highly congenial environment for economic growth.

The Growth of Labour Force

The rate at which population grows in a country largely determines the growth of the labour force. According to Adam Smith rate of population growth in the long run, however, depends entirely on the funds available for human sustenance. In case this is true, it may be argued that the wage rate prevailing in the market would be a crucial factor in determining the size of the population. In Smith's opinion, "subsistence wage" is consistent with a constant population. If in some country actual wages exceed the subsistence wage, population will show a tendency to increase. Conversely, if prevailing wage rates are less than the subsistence wage, population will decline. **The supply of labour is normally expected to be in equilibrium with the demand for labour.** If the demand for labour records a continuous rise pushing wage rates upward, it induces working

Capital Accumulation

In Smith's theory capital accumulation has been assigned a strategic role in the growth process. One would note that for him growth is functionally related to rate of investment. With a fixed capital stock, whatever be its size, a country is bound to suffer stagnation. According to Smith, any increase in capital stock in a country generally leads to more than proportionate increase in the output on account of continually growing division of labour. Underlining the importance of exogenous institutional changes he also asserted that adverse institutional developments do nullify the gains of capital accumulation from the point of view of growth. This observation is particularly significant, because now the emphasis seems to be primarily on techno-economic approach to growth.

According to Smith, the rate of investment, a crucial factor in economic growth, is determined by the rate of saving. He did not visualise any possibility of leakages occurring between saving and investment,

The Growth Process

We can now summarize the process of growth as visualised by Adam Smith. According to Smith, **in a developing economy both income level and capital stock rise. In addition, the rate of capital accumulation also shows a tendency to increase.** Obviously this factor enhances the capital stock of an economy in succeeding periods by increased doses of investment. Another factor of vital importance which contributes to the progress of an economy is a successive decline in the incremental capital-output ratio on account of the influence of capital on the productivity of labour. These factors reinforcing each other accelerate the pace of development until such time that the economy's capital stock grows large enough to eliminate profits, net of risk. At this stage the stationary state sets in.