

Economic Growth

Introduction

This article primarily intends to provide an elementary knowledge and understanding of some of the basic theoretical aspects of economic growth for the students offering Economics as a subject for GCE Advanced Level and the university undergraduates. The following aspects of economic growth are covered in this article: (a) definition of economic growth, (b) measuring of economic growth, (c) benefits of economic growth, (d) causes of economic growth, (e) policies of promoting economic growth, and (f) costs of economic growth.

Defining Economic Growth

Economic growth is an increase in the production capacity of goods and services of an economy. The more food, clothing, housing, cars and medical services a country can produce, the better off that country's citizens will be. Economic growth will increase the availability of these types of products over time, resulting in higher standard of living. **From a theoretical point of view, economic growth can be defined as an expansion of the production capacity or the potential output of an economy.** There are two ways of presenting the concept of economic growth. The first is in terms of production possibility frontier as shown in Figure 1 where economic growth is characterised as an outward shift of the production possibility frontier from PPF_1 to PPF_2 . In other words, economic growth enables a country to produce more goods and services in any given period as a result of an expansion of its production capacity.

The second way of presenting the concept of economic growth in

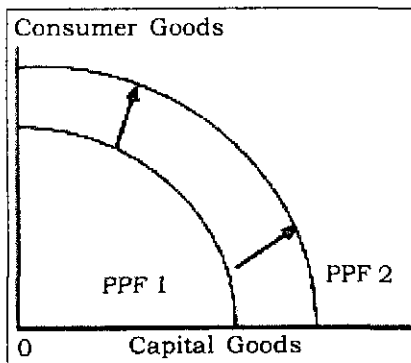


Figure 1 Economic Growth-Shift in production possibility frontier

terms of aggregate supply as shown in Figure 2. Economic growth involves a rightward shift in the economy's long-run aggregate supply curve. This corresponds to an increase in the economy's level of potential output. An increase in the economy's resource endowment and productivity will enable production of more goods and services at any given price, so that the aggregate supply curve will shift outwards from AS_1 to AS_2 . This entails an increase in full employment output (or potential output) from Y_1 to Y_2 .

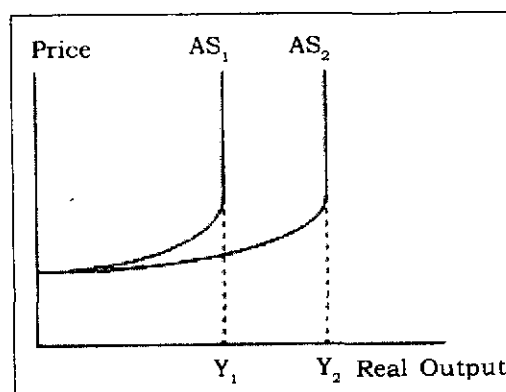


Figure 2 Economic Growth: A Shift in Aggregate Supply

Measurement of Economic Growth

Let us now discuss the best way of measuring growth. In a statistical sense, economic growth is an

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increase in real output of a country. Thus, economists use two methods to measure economic growth; (i) the increase in real GNP (Gross National Product) or NNP (Net National Product) which occurs over a period of time and (ii) the increase in real GNP or NNP per capita which occurs over time. Both measures are useful. For example, if we are concerned with the question of military potential or political pre-eminence, the first measure is more relevant. But per capita output growth is clearly superior for comparisons of living standards among nations or regions. Economic growth by either measurement is usually calculated in terms of annual percentage rates of growth. For example, if real GNP was Rs. 200 billion last year and is Rs. 210 billion this year, we can calculate the rate of growth by subtracting last year's real GNP from this year's real GNP, dividing the difference by last year's real GNP and multiplying by 100, i.e., $((210 - 200)/200) \times 100$, or 5 percent.

If economists try to measure economic growth using the rate of change of real GNP or per capita real GNP as an indicator, they are not necessarily measuring what they want to. GNP growth measures the *actual* rate of change of output rather than the growth of the *potential* output capacity of the economy. In Figure 3, a movement from point A to point B represents a move to the frontier. This is an increase in actual output

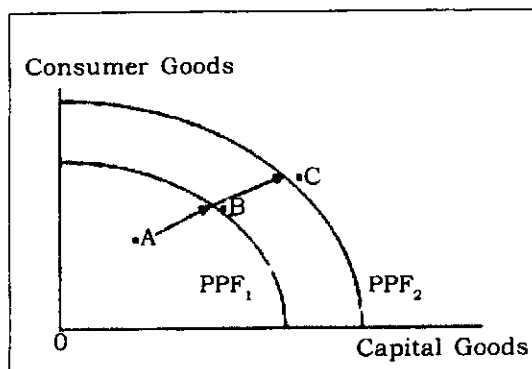


Figure 3 Different forms of Economic Growth

resulting from using up surplus capacity in the economy, but it is not economic growth in the theoretical sense, as moving from point A to point B does not entail an increase in productive capacity. In contrast, the shifting of the frontier itself, enabling the move from point B to point C, does represent economic growth. However, when economists observe a rate of change in real GNP, they cannot easily distinguish between the two types of effects, especially when the economy is subject to a business cycle. It is therefore, better to measure economic growth in terms of growth of real GDP (Gross Domestic Product).

Benefits of Economic Growth

Economic growth means increase in real output. It provides the following benefits:

i. Increasing incomes: The growth of total output relative to population means increasing standard of living. An expansion of real output enables consumers to enjoy more goods and services.

ii. Lowering unemployment: With higher output, firms tend to employ more workers, creating more employment opportunities.

iii. Reducing government borrowing: Economic growth creates higher tax revenues and hence the need borrowing to finance government expenditure will reduce.

iv. Reduction of poverty: A growing economy can undertake new programmes to alleviate poverty.

v. Improving public services: With increased tax revenues, the government can spend more on the provision of public goods and merit goods such as infrastructure

development, health care, education, etc.

vi. Protection of environment: A growing economy can allocate more funds for cleaning up of environment without impairing the existing levels of consumption, investment and public goods production.

vii. Lessening the burden of scarcity: A growing economy, unlike a static one, can consume more while simultaneously increasing its capacity to produce more in the future.

Causes of Economic Growth

Theoretically, the determinants of economic growth are the factors that can shift the Production Possibility Frontier (PPF) or the Long-Run Aggregate Supply (LRAS) curve to the right. These factors include; (a) quantity and quality of natural resources (b) quantity and quality of human resources (c) stock of physical capital (d) entrepreneurial ability (e) technological knowledge (f) property rights structure (g) economic freedom. These items may be called supply factors in economic growth.

i. Natural resources: Natural resources are those inputs of production that are provided by nature, such as land, rivers, and mineral deposits. Natural resources take two forms: renewable and non-renewable.

ii. Human capital: Human capital is the knowledge and skills that workers acquire through education, training and experience.

iii. Physical capital: The stock of equipment and structures that are used to produce goods and services is called physical capital.

iv. Entrepreneurial ability: The human resource that organises land, labour and capital is called entrepreneurship. Entrepreneurs come up with new ideas about what and how to produce, make business decisions, and bear the risks that arise from these decisions.

v. Social capital: Social capital refers to those stocks of social trust, norms and networks that people can draw upon to solve common problems. Networks of civic engagement, such as neighbourhood associations, sport clubs and cooperatives are an essential form of social capital, and the denser these networks, the more likely that members of a community will cooperate for mutual benefit. Social capital is productive, since two farmers exchanging tools can get more work done with less physical capital; rotating credit associations can generate pools of financial capital for increased entrepreneurial activity; and job searches can be more efficient if information is embedded in social networks.

vi. Technological knowledge: Technological knowledge is the understanding of the best ways of producing goods and services. Technological knowledge may take many forms. Some technology is common knowledge – after it becomes used by one person, everyone becomes aware of it. Other technology is proprietary – it is known only by the company that discovers it. Still other technology is proprietary for a short time. When a pharmaceutical company discovers a new drug, the patent system gives that company a

temporary right to be its exclusive manufacturer. When the patent expires, however, other companies are allowed to make the drug. All these forms of technological knowledge are important for the economy's production of goods and services.

v. Property rights structure: Property rights refer to the laws, rules, and regulations that define rights for the use and transfer of resources. Consider two property right structures. In one structure, people are allowed to keep the full monetary rewards of their labour. In the other, people are allowed to keep only half. Many economists would predict that the first property rights structure would stimulate more economic activity than the second.

vii. Economic freedom: Some economists believe that economic freedom leads to economic growth. Countries in which people enjoy a higher degree of economic freedom develop and grow more quickly than countries in which people have lesser economic freedom. The Heritage Foundation and the *Wall Street Journal* have joined together to produce an "index of economic freedom." The index is based on 50 independent variables divided into 10 broad categories of economic freedom, such as trade policy, monetary policy, property rights structure, regulation, fiscal burden of government, and so on. The data show that economic freedom and real GNP per capita are correlated.

The above-mentioned factors that can shift the production possibility frontier to the right may be termed the **supply factors** in economic growth. They are physical and institutional elements that can enhance production and productivity. But the ability to grow and the actual realisation of growth may be quite different things. Specifically, two additional considerations contribute to growth. First, there is a **demand**

factor in growth. To realise its growing productive potential, a country must provide for the full employment of its expanding supply of resources. This requires a growing level of aggregate demand. Second, there is an **allocative factor** in growth. To achieve its productive potential, a country must provide not only for the full employment of its resources, but also for full production from them. The ability to expand production is not a sufficient condition for the expansion of total output. The actual employment of expanded resource supplies and the allocation of those resources in such a way as to get the maximum amount of useful goods produced are also required.

Policies of Promoting Economic Growth

Promoting economic growth means shifting rightward the production possibility frontier or the long-run aggregate supply curve. Therefore, the policies of promoting economic growth should aim at enhancing resource endowment and productivity. Such policies include; (a) promoting savings and investment, (b) encouraging foreign investment, (c) investment in human capital, (d) protecting property rights and promoting political stability, (e) liberalising trade, (f) lowering taxes and reducing regulation, and (g) promoting research and development.

i. Promoting savings and investment: Because capital is a produced factor of production, a country can change the amount of capital it has. Thus, one way of raising future productivity is by investing more current resources in the production of capital. To raise the level of capital stock of the economy, it requires that the country sacrifice the present consumption of goods and services. Encouraging saving and investment

through monetary and fiscal policies is one way that a government can encourage growth.

ii. Encouraging foreign investment: Saving by domestic residents is not the only way for a country to invest in new capital. The other way is investment by foreigners. Investment from abroad take several forms. A capital investment that is owned and operated by a foreign entity is called foreign direct investment. An investment that is financed with foreign money but operated by domestic residents is called foreign portfolio investment. In both cases, foreign investors contribute to increase the domestic stock of capital.

iii. Investment in human capital: Education – investment in human- capital is at least as important as investment in physical capital for a country's long-run economic success. One way in which government policy can enhance the standard of living is by providing good schools and quality education and encouraging the population to take advantage of them.

iv. Protecting property rights and promoting political stability: Property rights refer to the ability of people to exercise authority over the resources they own. For this reason, judicial system serves an important role in a market economy. It enforces property rights, ensuring buyers and sellers live up to their contracts. In many countries, the system of justice does not work well. Contracts are hard to enforce, and fraud often goes unpunished. To do business in some countries, firms are expected to bribe powerful government officials and ministers. Thus, economic prosperity depends, in part, on political prosperity. A country with an efficient judiciary system, honest government officials and a stable constitution will enjoy a higher economic

standard of living than a country with a poor judiciary system, corrupt officials and unstable political system.

v. Liberalising trade: Most economists today believe that countries are better off pursuing outward-oriented policies that integrate these countries into the world economy. Trade is, in some ways, a type of technology. When a country exports tea and imports steel, the country benefits in the same way as if it had invented a technology for turning tea into steel. A country that eliminates trade restrictions will, therefore, experience the same kind of economic growth that would occur after a major technological advance.

vi. Reducing taxes and regulations: The reduction of tax rates and regulations would encourage private investment.

vii. Promoting research and development: The primary reason that living standards are higher today than they were century ago is that technological knowledge has advanced. Although most technological advances come from private research by firms and

individual inventors, the government has a role in encouraging the research and development of new technologies. Using its fiscal policy instruments, the government can grant incentives to encourage research and development. Another way in which government policy encourages research is through the patent system. By allowing inventors to profit from their inventions, the patent system enhances the incentive for individuals and firms to engage in research.

Disadvantages of Economic Growth

In recent years, serious questions have been raised about the desirability of continued economic growth for already affluent societies. The following interrelated arguments comprise the anti-growth sentiment:

i. Environmental concerns: Fast growth of production and consumption can create negative externalities (for example, increased noise and lower air quality arising from air pollution and road congestion, rapid growth of household and industrial waste).

Growth that leads to environmental damage can have a negative effect on the people's quality of life and may also impede a country's sustainable rate of growth.

ii. Human obsolescence: The changing technology that is the core of growth, poses new anxieties and new sources of insecurity for workers. Both high-level and low-level workers face the prospect of having their hard-earned skills and experience made obsolete by an onrushing technology, thus becoming structurally unemployed.

iii. Opportunity cost: The opportunity cost of higher economic growth is the sacrifice of current consumption which could otherwise have been enjoyed. Current consumption is being sacrificed to achieve a higher rate of consumption in the future.

iv. Inflation risk: If the economy grows too fast too quickly, there is the danger of inflation as demand raises ahead of aggregate supply.

v. Inequity in income distribution: Rapid economic growth could result in disparities in income distribution. ■