

Economic Growth

Name

School Affiliation

Economic growth is often defined as the continual increase in the quantity of goods and services an economy produces for a particular period. For example, starting from the Industrial Revolution, England underwent sustained economic growth for 250 years (Kanodia, n.d). The reason for this production increase was the consumers' access to a large volume of goods and many services, which raised their living standards. During the same period, economic prosperity grasped the rest of the world as well.

The particular economy described in an economic growth example is not limited to a country or nation. It can also describe the economy of a political or social unit, namely a population group, city, region, group of cities, group of nations, or the whole world. Ideally, economic growth translates into improved living standards for all. Modern definitions of economic increase, therefore, include rising economic output as a catalyst. In particular, modern economic growth theories describe the conditions in which a unit can continuously supply a ballooning population through higher volumes of goods and services produced per capita.

However, in reality, economic growth is not all positive. It may be both positive and negative for total production or production volume per capita. This is why some researchers perceive economic growth not to be about improving standards of living. Instead, they define it as having the ability to sustain a growing population with the same standard of living or even a slight reduction in living standards (Kanodia, n.d).

Growth Theory

The growth theory became a popular subject during World War II (1939 to 1945) (Kanodia, n.d), and various theories emerged to explain why some nations were wealthy and why some were poor. Sources of growth, according to these theories, encompass the growth of the workforce, increase in accumulated capital, and significant technological advancements. The growth theory is mainly used to explain why a nation's income is growing. It identifies where growth is generated or the sources of growth.

Economic growth is mainly measured by gross domestic product (GDP) data, as this reflects how much income people of a country are earning. Scholars in the 1950s observed that economic growth rates prevailing in the 20th century were remarkably higher compared with any other growth periods. Experts claimed that this is due to the combined forces of high labor and capital input growth (Kanodia, n.d).

Extensive vs. Intensive Growth

Extensive Growth

According to the growth accounting approach (Denison, 1974), growth in the quantity of labor, capital inputs, and productivity can lead to economic growth. In recent years, growth is no longer measured by the number of hours worked by laborers (Kanodia, n.d). Productivity growth originates from technological advancements and a coinciding reduction in hours worked. In the 1950s, technology-facilitated productivity led to a previously unprecedented growth rate. The rates were much higher than could be accounted for by the combined growth of labor and capital inputs (Kanodia, n.d).

The growth accounting approach also categorized growth into extensive and intensive.

Extensive growth and intensive growth are said to take place in succession, with the former preceding the latter. Extensive growth takes place when capital and labor increases. Intensive growth then takes place when there is an overall increase in total factor productivity due to technological sophistication and advancements (Kanodia, n.d).

Extensive growth, again, is caused by a significant increase in the supply of production factors; that is, capital stock and labor force hours. If capital stock increases by a unit, this will generate a corresponding increase in output, which is the marginal product of capital (MPK) multiplied by the capital stock increase (dK). On the other hand, if the labor force increases by dL, there will be a resulting increase corresponding to the marginal product of labor (MPL) multiplied by dL, Economists framed total increase as the sum of these two and presented this in the following formula: $dY = (MPK \times dK) + (MPL \times dL)$

Extensive economic growth is also explained by the neoclassical theory of production, as well as the hypothesis of profit maximization (Popa, 2014). Both theories suggest that the marginal product of capital is equal to the real rental price of capital. This implies that the marginal product of capital multiplied by the capital stock increase (MPK x K) is equal to the total return of capital, while the capital's share in output can be measured as (MPK x K)/Y. In the same vein, the marginal product of labor is equal to the real wage. In this case, the marginal product of labor multiplied by labor increase (MPL * L) represents the total compensation of the labor force.

Accordingly, to measure labor's share in the output, the following formula is used: $MPL \times L / Y$ (Kanodia, n.d).

An alternative explanation for extensive growth is, if more resources are utilized, it becomes the primary foundation of increased output. Growth in GDP can be described as extensive when more inputs from the four factors of production, namely land, labor, capital, and entrepreneurial activities, trigger or explain the growth (Colombatto, 2006). By land, this means more than just land in the physical sense; it includes acreage water, trees, minerals, and other natural resources related to extraction. Growth is extensive if more natural resources were used to fuel growth activities. This is measured through the expenses allocated to cover the market prices for these resources, in direct relation to the rates of extraction necessary. Labor is, again, measured through the number of hours worked. Growth is extensive if growth activities have been fuelled by people working more hours (Colombatto, 2006). Capital refers to the use of machines and factories, including technologies.

If more intensive use of machines, factories, and other technological advancements were needed to fuel growth activities, then GDP growth can be said to be extensive. Some population groups have more capital than others. A city will naturally have more capital resources than a small town; therefore, the former's capacity for a significant and sustained growth can be expected to be higher. Lastly, growth is extensive if triggered by the higher level of entrepreneurial activities. If more people are willing to take more risks to start and engage in their own businesses, accumulating the factors of production, and selling their output, then extensive growth can take place (Colombatto, 2006).

Intensive Growth

On the other hand, intensive growth is characterized mainly by the increase in total factors of production, the growth of capital per hour of work, and the rate of technological change. Productivity and capital per hour of work are significantly correlated. Higher capital per hour generates more output per hour. In addition, technological sophistication and advancements can lead to higher productivity for a particular level of capital per hour of work (Colombatto, 2006).

An alternative explanation for intensive growth is, in this case, economic growth is not triggered by more resources being utilized. Instead, it is caused by the most productive utilization of already available and functional factors of production. Requiring and using more resources do

not trigger intensive growth, but the maximization of the use of these already available resources, usually through technological improvements, enables such (Colombatto, 2006).

In particular, through technological advancements, land and other natural resources can be extracted much easier and faster. With technological improvements, land from far-flung areas, even those in the more remote locations, can be utilized for growth activities. With the aid of new technologies, resources from untapped or overlooked forms in the past can be used to improve productivity. For instance, it was not a common practice to extract petroleum from the oil sands of Alberta, Canada up until technologies were created to make this possible (Colombatto, 2006).

When it comes to the labor factor of production, it is stated that if growth is not triggered mainly by adding more workers or adding more hours worked, but instead improved through training and upgrading of skill levels, the growth is characterized as intensive (Colombatto, 2006). The combination of technological improvements, leading to the more efficient use of natural resources, plus a better trained and better-equipped workforce may result in the more efficient production process or, in other words, better use of capital. This is the third source of intensive growth. In relation, when it comes to entrepreneurial activities, these can lead to the intensive growth of various programs; small business coalitions or cooperative organizations are utilized to aid in growth activities (Colombatto, 2006).

References

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