

# Models of Economic Growth

## **Classical Model of Economic Growth**

Every nation strives after development. Economic progress is an essential component, but it is not the only component. Economic development is not purely an economic phenomenon. In an ultimate sense, it must encompass more than the material and financial side of people's lives. Economic development should therefore be perceived as a multidimensional process involving the reorganization and reorientation of entire economic and social systems. In addition to improvements in incomes and output, it typically involves radical changes in institutional, social, and administrative structures. Finally, although development is usually defined in a national context, its widespread realization may necessitate fundamental modification of the international economic and social system as well.

The classical theories of economic development consist of following four schools of thought:

**1. Linear-stages-of-growth model:** Theorists of the 1950s and 1960s viewed the process of development as a series of successive stages of economic growth through which all countries must pass. It was primarily an economic theory of development in which the right quantity and mixture of saving, investment, and foreign aid were all that was necessary to enable developing nations to proceed along an economic growth path that historically had been followed by the more developed countries. Development thus became synonymous with rapid, aggregate economic growth.

This linear-stages approach was largely replaced in the 1970s by two competing economic schools of thought – *theories of structural change* and *international-dependence theories*.

**2. Theories and patterns of structural change:** Theories and patterns of structural change uses modern economic theory and statistical analysis in an attempt to portray the internal process of structural change that a “typical” developing country must undergo if it is to succeed in generating and sustaining a process of rapid economic growth.

Structural-change theory focuses on the mechanism by which under-developed economies transform their domestic economic structures from a heavy emphasis on traditional subsistence agriculture to a more modern, more urbanised, and more industrially diverse manufacturing and service economy. It employs the tools of neo-classical price and resource allocation theory and modern econometrics to describe how this transformation process takes place. Two well-known representative examples of the structural-change approach are the ‘two-sector surplus labour’ theoretical model of Sir W. Arthur Lewis, and the ‘patterns of development’ empirical analysis of Hollis B. Chenery and his co-authors.

**3. International-dependence revolution:** The international-dependence revolution was more radical and political in orientation. It viewed underdevelopment in terms of

international and domestic power relationships, institutional and structural economic rigidities, and the resulting proliferation of dual economies and dual societies both within and among the nations of the world. Dependence theories tended to emphasize external and internal institutional and political constraints on economic development. Emphasis was placed on the need for major new policies to eradicate poverty, to provide more diversified employment opportunities, and to reduce income inequalities.

International-dependence models view developing countries as troubled by institutional, political, and economic rigidities, both domestic and international, and caught up in a *dependence* and *dominance* relationship with rich countries. Within this general approach there are three major streams of thought – the neo-colonial dependence model, the false-paradigm model, and the dualistic-development thesis.

**4. Neoclassical or free-market counterrevolution:** This theory is also known as neo-liberal theory. Throughout of the 1980s and 1990s, the neoclassical or free-market counterrevolution approach prevailed. It emphasizes the beneficial role of free markets, open economies, and the privatisation of inefficient public enterprises. Failure to develop, according to this theory, is not due to exploitive internal and external forces as expounded by dependence theorists. Rather, it is primarily the result of too much government intervention and regulation of the economy.

In the 1980s, the political ascendancy of conservative governments in the United States, Canada, Britain, and West Germany brought a *neoclassical counterrevolution* in economic theory and policy. In developed nations, this counterrevolution favoured supply-side macroeconomic policies, rational expectations theories, and the privatisation of public corporations. In developing countries it called for freer markets and the dismantling of public ownership, central planning, and government regulation of economic activities. Neo-classicists obtained controlling votes on the boards of the world's two most powerful international financial agencies — the World Bank and the International Monetary Fund. In conjunction and with the simultaneous erosion of influence of organizations such as the International Labour Organization (ILO), the United Nations Development Program (UNDP), and the United Nations Conference on Trade and Development (UNCTAD), which more fully represent the views of LDC delegates.

The neo-classical approach states that underdevelopment arises from:

- Poor resource allocation due to incorrect price policies, and
- Government's intervention in the economic activities.

Neo-classical or neo-liberal approach states that economic growth can be put to spur by:

- Permitting competitive free markets to flourish,
- Privatising state-owned enterprises,
- Promoting free trade and export expansions,
- Welcoming investors from developed economies, and

- Eliminating the plethora of government regulations and price distortions in factor, product and market.

### **1. Linear-stages-of-growth model:**

Following are the growth models studied under linear-stages:

**(a) Rostow's Stages of Growth:** The stages-of-growth model of development is taken by most of the newly independent countries. According to Walt W. Rostow doctrine, the transition from underdevelopment to development can be described in terms of a series of steps or stages through which all countries must proceed. According to Rostow, it is possible to identify all societies, in their economic dimensions, as lying within one of five categories:

- The traditional society,
- The pre-conditions to take-off into self-sustaining growth,
- The take-off,
- The drive to maturity, and
- The age of high mass-consumption.

Rostow also clarified that these stages are not merely a way of generalising certain factual observations about the sequence of development of modern societies. He argued that the advanced countries had all passed the stage of take-off into self-sustaining growth and the under-developed countries that were still in either the traditional society or the pre-conditions stage. One of the principal strategies of development necessary for any take-off was the mobilisation of domestic and foreign saving in order to generate sufficient investment to accelerate economic growth.

**(b) Harrod-Domar Model:** This model, developed independently by RF Harrod and ED Domar in the 1930s, suggests savings provide the funds which are borrowed for investment purposes.

The model suggests that the economy's rate of growth depends on:

- the level of saving
- the productivity of investment i.e. the capital output ratio

For example, if \$10 worth of capital equipment produces each \$1 of annual output, a capital-output ratio of 10 to 1 exists. A 3 to 1 capital-output ratio indicates that only \$3 of capital is required to produce each \$1 of output annually.

The Harrod-Domar model was developed to help analyse the business cycle. However, it was later adapted to 'explain' economic growth.

### **2. Structural-change theory:**

Following economic growth model represents the structural-change theory:

**(a) Lewis Theory of Development:** It is one of the best-known early theoretical models of economic development that focused on the structural transformation of a primarily subsistence economy was that formulated by Noble-prize winner Sir W. Arthur Lewis in the mid 1950s. His theory was later modified by his followers. The Lewis two-sector economy model became the general theory of the development process in surplus-labour Third-World nations during most of the 1960s and 1970s. In the Lewis model, the underdeveloped economy consists of two sectors:

- A traditional, overpopulated rural *subsistence sector* characterised by zero-marginal labour productivity. Lewis classify this as ‘surplus-labour’ in the sense that it can be withdrawn from the agricultural sector without any loss of output, and
- A high, productivity modern urban *industrial sector* into which labour from the subsistence sector is gradually transferred.

The primary focus of the model is on both the process of labour transfer and the growth of output and employment in the modern sector. Both labour transfer and modern-sector employment growth are brought about by output expansion in that sector.

**(b) Patterns of Development:** The patterns of development analysis of structural change focuses on the sequential process through which the economic, industrial and institutional structure of an underdeveloped economy is transformed over time to permit new industries to replace traditional agriculture as the engine of economic growth.

In addition to the accumulation of capital both physical and human, a set of interrelated changes in the economic structure of a country are required for the transition from a traditional economic system to a modern one.

These structural changes involve virtually all economic functions, including the transformation of production and changes in the composition of consumer demand, international trade and resource use as well as changes in socio-economic factors such as urbanisation, and the growth and distribution of a country’s population.

### **3. International-dependence revolution:**

Within this general approach, there are three major streams of thought:

**(a) Neo-Colonial Dependence Model:** It is an indirect outgrowth of Marxist thinking. It refers to the existence and continuance of underdevelopment in a highly unequal international capitalist system. The international system is dominated by unequal power relationships between the centre (the developed nations) and the periphery (the less developed countries). The poor nations

attempt to become self-reliant and independent but this system makes it difficult and sometimes even impossible.

According to this theory, certain groups in the developing countries (including landlords, entrepreneurs, military rulers, merchants, salaried public officials, and trade union leaders) who enjoy high incomes, social status, and political power constitute a small elite ruling class whose principal interests are in perpetuation of the international capitalist system of inequality. Directly and indirectly, they serve (are dominated by) and are rewarded by (are dependent on) international special-interest power groups including multinational corporations, national bilateral-aid agencies, and multilateral assistance organizations like the World Bank or the International Monetary Fund (IMF). Therefore, a major restructuring of the world capitalist system is required to free dependent developing nations from the direct and indirect economic control of their developed-world and domestic oppressors.

Curiously, a very similar but obviously non-Marxist perspective statement was expounded by Pope John Paul II in his widely quoted 1988 encyclical letter:

*“One must denounce the existence of economic, financial, and social mechanisms which, although they are manipulated by people, often function almost automatically, thus accentuating the situation of wealth for some and poverty for the rest. These mechanisms, which are manoeuvred directly or indirectly by the more developed countries, by their very functioning, favour the interests of the people manipulating them. But in the end they suffocate or condition the economies of the less developed countries.”*

**(b) False-Paradigm Model:** The second and less radical international-dependence approach to development, the *false-paradigm model*, attributes underdevelopment to faulty and inappropriate advice provided by well-meaning but often uninformed, biased, and ethnocentric international ‘expert’ advisers from developed-country assistance agencies and multinational donor organizations. These experts offer sophisticated concepts, elegant theoretical structures, and complex econometric models of development that often lead to inappropriate or incorrect policies. Because of institutional factors such as the central and remarkably resilient role of traditional social structures (i.e., tribe, caste, class, etc.), the highly unequal ownership of land and other property rights, the disproportionate control by local elites over domestic and international financial assets, and the very unequal access to credit, these policies, based as they often are on mainstream, Lewis-type surplus labour or Chenery-type structural-change models, in many cases merely serve the vested interests of existing power groups, both domestic and international.

**(c) Dualistic Development Thesis:** *Dualism* is a concept widely discussed in development economics. It represents the existence and persistence of increasing divergences between rich and poor nations and rich and poor peoples on various

levels. One of the elements of dualism is that there is a coexistence of wealthy, highly educated elites with masses of illiterate poor people within the same country or city. According to this theory, there is a coexistence of powerful and wealthy industrialized nations with weak, impoverished peasant societies in the international economy.

This coexistence is chronic and not merely transitional. It is not due to a temporary phenomenon, in which with the capacity of time, the discrepancy between superior and inferior elements would be eliminated.

#### **4. Neo-classical counterrevolution:**

This approach can be implemented through the following three models:

**(a) Free-Market Analysis:** Free-market analysis argues that markets alone are efficient if:

- Product markets provide the best signals for investments in new activities,
- Labour markets respond to these new industries in appropriate ways,
- Producers know best what to produce and how to produce it efficiently, and
- Product and factor prices reflect accurate scarcity values of goods and resources.

Under free-market, competition is effective not necessarily perfect. Technology is freely available and nearly costless to absorb. Information is correct and nearly costless to obtain.

**(b) Public-Choice Theory:** Public-choice theory, also known as '*new political economy approach*', goes even further to argue that government can do nothing right. This is because that politicians, bureaucrats, citizens and states act solely from a self-interested perspective, using their powers and the authority of government for their own selfish needs. Citizens use political influence to obtain special benefits (sometimes also referred to as '*rent*') from government policies, for example, import licenses, or rationed forex. Politicians use government resources to consolidate and maintain positions of power and authority. Bureaucrats use their positions to extract bribes from rent-seeking citizens and to operate protected business on the side. And finally state uses its power to confiscate private property from individuals. The net result is not only a misallocation of resources but also a general reduction in individual freedoms. The conclusion, therefore, is that minimal government is the best government.

**(c) Market-Friendly Approach:** The third approach is market-friendly approach, which is the most recent variant on the neoclassical counterrevolution. It is associated principally with the writings of the World Bank and its economists, many of whom were more in the free-market and public-choice camps during the 1980s. This approach recognizes that there are many imperfections in LDC product and factor markets and that governments do have a key role to play in

facilitating the operation of markets through ‘non-selective’ (market-friendly) interventions — for example, by investing in physical and social infrastructure, health care facilities, and educational institutions and by providing a suitable climate for private enterprise.

### **Karl Marx’s Model**

Czarist Russia grew rapidly from 1880 to 1914; it was considerably less developed than industrialised countries like US and Great Britain. World War I brought great hardship to Russia and allowed the communists to seize power. From 1917 to 1933, the Soviet Union experimented with different socialist models before settling on central planning. Most economists believed until recently that the Soviet Union grew rapidly from 1928 until the mid 1960s. After the mid 1960s, growth in Soviet Union stagnated and output actually began to decline. In the late 1980s and early 1990s, open inflation erupted. Prices were well below market-clearing levels and acute shortages arose in what is called ‘repressed inflation’. The repressive political system was unacceptable to the people in Soviet Union and some countries in Eastern Europe and was universally rejected in 1989.

The father of this repressive political system – Communism is Karl Marx (1818 – 1883). The centrepiece of Marx’s work is an incisive analysis of the strengths and weaknesses of capitalism. He argued that it is the only labour power that gives value to a commodity. By imputing all the value of output to labour, Marx hoped to show that profits, which is the part of output that is produced by workers but received by capitalists, amount to ‘unearned income’. According to Marx, this unearned income is unjustly received by capitalists. This injustice can be eliminated by transferring the ownership of factories and other means of production from capitalists to workers.

Marx saw capitalism as inevitably leading to Socialism. In Marx’s world, technology enables capitalists to replace workers with machinery as a means of earning greater profits. As a result unemployment increases with the increased use of technological advances. This increasing accumulation of capital will reduce the rate of profit and investment opportunities, and therefore, the ruling capitalists will become imperialists. Karl Marx believed that the capitalist system could not continue this unbalanced growth. Marx predicted increasing inequality under capitalism. Business cycles would become ever more violent as mass poverty resulted in macro-economic under-consumption. Finally, a cataclysmic depression would sound the death knell of capitalism. The economic interpretation of history is one of Marx’s lasting contributions to Western thought. Marx argued that economic interests lie behind and determine our values. His arguments against capitalism suggested communism would arise in the most highly developed industrial countries. Instead, it was backward, feudal Russia that adopted the Marxist vision.

### **Features of Karl Marx’s Socialist Model:**

1. Government ownership of productive resources,
2. Planning is centralised,
3. Equal distribution of income,
4. Peaceful and democratic evolution,

5. Labour theory of value – value of a product represents the human labour used in production, and
6. Theory of surplus value.

**Theory of Surplus Value:**

Marx propounded his theory of surplus value on the basis of his theory of value. He said that in order to enable labour to carry on the work of production, he should have some instruments of production and other facilities but he lacks these facilities. Hence, he has to sell his labour to the capitalist. It is, however, not necessary for the capitalist to pay labour the full value of the product produced by him. Here Karl Marx supported his theory on the basis of a classical theory, viz., the subsistence theory of value, according to which the level of wages is determined by the subsistence of the worker. The work of labour force is not merely to produce value equal to its price but much more. This surplus value is the difference between the market value of the commodity and the cost of the factors used in the production of commodity. Karl Marx says that the manufacturer gets for his commodity more than what he has spent on labour and other costs. The excess of market value over the costs is the surplus value. This surplus is created because labour is paid much less than is due to it. He characterises the appropriation of the surplus value by the capitalist as robbery and exploitation. The capitalist class goes on becoming richer and richer through exploitation of the working class.