Chapter 2
Theories of Economic Development

Abstract  This chapter reviews some of the most prominent theories of economic development. These theories describe tools and strategies for making development goals achievable. The chapter starts with early views about the nature of economic prosperity. The chapter then reviews classical theories with four main clusters: linear stages of growth models; structural change models; international dependence models; and neoclassical counter-revolution models. Subsequently, contemporary theories of economic development, including new growth theory and theory of coordination failure, are reviewed. Finally, implications of the changes in the development thoughts and their importance in studying development problems in the developing countries conclude the chapter.

Keywords  Economic development goals · Theories of economic development · Developing countries · Classical theories · Contemporary theories

2.1 Introduction

The problems of economic development, which are complex and multidimensional, have resulted in the development of a number of theories, explanations, arguments and assertions (World Bank 2000). The purpose of this chapter is to review some of the most prominent theories of economic development. These theories describe tools and strategies for making development goals achievable. The chapter starts with early views about the nature of economic prosperity. The chapter then reviews classical theories with four main clusters: linear stages of growth models; structural change models; international dependence models; and neoclassical counter-revolution models. Subsequently, contemporary theories of economic development, including new growth theory and theory of coordination failure, are reviewed. Finally, implications of the changes in the development thoughts and their importance in studying development problems in the developing countries conclude the chapter.
2.2 Goals of Economic Development

2.2.1 Growth of Gross National Product

The goal of economic development in its simplest form is to create the wealth of a nation. Prior to the 1970s, rapid economic growth has been considered a good proxy for other attributes of development (Todaro and Smith 2009). Economic performance is measured by an annual increase in gross national product (GNP) [an alternative measure is gross domestic product (GDP)]. For the purpose of comparability, GNP is expressed in a common currency, usually US dollars, and reported in per-capita terms to take into account the size of a nation’s population (Jaffee 1998). The World Bank now replaces GNP per capita with gross national income (GNI) per capita to compare wealth among countries. The World Bank defines GNI as the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Meanwhile, the World Bank still uses GDP in many other featured economic indicators (World Bank 2011).

However, the indicator is a measure of well-being and development exclusively based on material wealth. Improvements in welfare such as better health care, education and more housing for large parts of the poor population have not been captured. The experience of the 1950s and 1960s has shown that GNP growth would not necessarily result in a better life for a nation’s population. The narrow goal of development (economic growth) induced nations to focus their energies narrowly on the rapid growth of national incomes (Todaro and Smith 2003). “To maximize income growth, environmental considerations were left to languish on the sidelines; the standard of living was often allowed to slide; large inequalities between classes, regions, and genders were ignored; and poverty was tolerated more than it should have been in the rush to generate maximum growth” (Basu 2000, p. 64). It was then scholars and policy-makers in most developing countries who realized that income growth was only one dimension of development; a new economic view of development has arrived.

2.2.2 Quality of Life

During the 1970s, the concern of millions of people living subsistence lives in poverty turned the attention of development economists to people’s lives rather than their incomes. Many developing countries have experienced high growth rates of
per-capita income but little change in the living conditions of a large part of the population. By questioning whether it is the goal of development that per-capita income increases but poverty, inequality and unemployment are growing worse, Seers (1969) marked the change needed in setting development objectives. The goal of development during the period was thus not limited to economic growth but to concentrate on the reduction of poverty, inequality and unemployment (Seers 1979).

In the 1990s, economists increasingly recognized that it was the quality of life that determines whether people are from developing countries or not. Diseases, malnourishment and death that happen in the everyday lives of those from the developing countries changed the view of development goals dramatically. By then, like many scholars around the world, Stiglitz (1998) contributed to shift the development goals set by governments in developing countries to wider objectives, including improvements in income distribution, environment, health and education. A broader perspective of development goals is hence necessary as reflected in the World Bank’s Development Report (1991, p. 4) as “to improve the quality of life. Especially, in the world’s poor countries, a better quality of life generally calls for higher incomes—but it involves much more. It encompasses as ends in themselves better education, higher standards of health and nutrition, less poverty, a cleaner environment, more equality of opportunity, greater individual freedom, and a richer cultural life.”

Sen’s (1985, 1992, 1999) work perhaps has brought about the broadest perspective of development goals. According to Sen (1985), the ultimate goal of development is to enhance human capabilities, which is defined as “the freedom that a person has in terms of the choice of functionings, given his personal features (conversion of characteristics into functionings) and his command over commodities…” (Sen 1985, p. 13). Higher income is necessary but not sufficient in terms of quality of life. Under his approach, goals of economic development change from promotion of growth to promotion of well-being.

These changes in the definition of development goals posed the need to construct alternative composite indices to reflect quality of life. These indices should take into account not only money indicators but also non-monetary indicators to reflect the development levels achieved. There have been attempts to build indicators that measure the standard of living and quality of life, which focus on the quantitative and qualitative aspects: health, education, environment and material well-being (Berenger and Verdier-Chouchane 2007). Using Sen’s (1985) approach, the Human Development Index (HDI) has been published annually since 1990 by the United Nations Development Programme as an attempt to provide an aggregate measure of life expectancy, education and income (Elkan 1995).

2.2.3 Sustainable Development

Increasingly, academics and societies realize the effects of human actions on the environment. On the way to achieve rapid economic growth, countries around the world have been exploiting their natural resource reserves at alarming rates.
Although early economists included the natural environment in their economic analysis, environmentalism only drew international attention in the 1960s (Pearce and Turner 1990). The relationship between development and environment has given birth to the sustainable development concept. The central idea of sustainable development is that global ecosystems and humanity itself can be threatened by neglecting the environment.

Environmental economists are concerned that the long-term neglect of the environmental assets is likely to jeopardize the durability of economic growth (Thampapillai 2002). Sustainable development therefore “involves maximizing the net benefits of economic development, subject to maintaining the services and quality of natural resources over time” (Pearce and Turner 1990, p. 24). Its concern is about balancing the objectives of economic growth and attending to environmental considerations.

In a broader sense, sustainable development is defined by the Brundtland Commission, formally the World Commission on Environment and Development, as “progress that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987, p. 8). Although this standard definition brings the term “sustainable development” into common use, it has created ambiguity in application (Redclift 1992; Daly 1996; Payne and Raiborn 2001). Much of the debate around the definition seeks to answer the two questions “What should be sustained” and “What should be developed” (Kates et al. 2008).

Today, sustainable development aims to improve the quality of life in a comprehensive manner, including economic prosperity, social equity and environmental protection. Economic, social, environmental and cultural aspects must be integrated in a harmonious manner to enhance the intergenerational well-being (World Bank 2003).

### 2.2.4 The Millennium Development Goals

Eight Millennium Development Goals (MDGs) were adopted by member countries of the United Nations in September 2000. The MDGs were developed to address the most pressing problems in developing countries, including poverty and hunger, primary universal education, gender equality, child health, maternal health, HIV/AIDS, environmental sustainability and global partnership. Member countries of the United Nations have committed themselves to end poverty and achieve other development goals by 2015. Quantitative targets of these goals were then assigned based on the past rates of international development achievements (United Nations 2011).

However, the MDGs were criticized for failing to include other critical objectives of development, such as improving legal and human rights of the poor, slowing global warming and leveraging the contributions of the private sector. Critics also argued that the MDG targets were not ambitious enough and were not prioritized (Todaro and Smith 2009).
The latest 2012 report showed a remarkable progress made by countries, including those in sub-Saharan Africa. The review maintained that the MDGs are still achievable. Increased supports from national governments, the international community, civil society and the private sector are considered necessary to meet the MDGs (United Nations 2012).

2.3 The Evolution of Economic Development Thoughts

2.3.1 Early Views About the Nature of Economic Society and Prosperity

Although development economics became established as a discipline within economics only in the 1950s, several early economists had written extensively about the nature of economic society and prosperity. Among them, Adam Smith and Karl Marx are the two most famous thinkers for their two opposite views on the nation’s system of economic arrangements: one called capitalism and the other called socialism.

On the one hand, Adam Smith’s (1976) (original work published in 1776) “The Wealth of Nations” focuses on the market. Adam Smith saw that division of labour could create more productive processes. The mechanism for enhancing the nation’s wealth therefore is through specialization and exchange. Adam Smith argued that under competition, private investors while pursuing their own interests guided by the “invisible hand” would maximize national output and thus promote public interests. The “invisible hand” doctrine has become the foundation for the working of the market economy or capitalism (Skousen 2007). In the system, government interference is seen as inefficient in looking after economic activities. Meanwhile, free trade, private property and competition are seen as the foundations that would spur economic development, reduce poverty and bring on social and moral improvements of humankind. However, freewheeling capitalism is often criticized for bringing wealth only to the rich, whereas the poor get poorer.

On the other hand, Karl Marx in “Capital” (Marx 1933) (original work published in 1867) argued that the feasible system should be based on social or public ownership of property. Karl Marx emphasized that the wealth of the capitalists comes from the exploitation of the surplus value created by the workers. Hence, private property and free market were seen as causes of poverty for the many millions of workers. Therefore, private property should be completely abolished. A nation’s economy should be planned and managed by the state to serve the interests of the masses. Marx believed that a revolution would be inevitable to break down the increasing concentration of the capitalists, and to establish socialism (Roemer 1988; Skousen 2007). But the socialism philosophy was not viable either. The historical experience of socialist economies showed little or even no improvement in the living conditions of the poor. The collapse of the Soviet Union in 1991 and the central planning paradigm appeared to demonstrate that the model would not provide the solution to poverty and inequality seen in human society (Meier 2000).
2.3.2 Classical Theories of Economic Development

2.3.2.1 The Linear Stages of Growth Models

The first generation of economic development models was formulated in the early years after the World War II. These early models focused on the utility of massive injections of capital to achieve rapid GDP growth rates. The two famous models are Rostow’s stages growth model and the Harrod–Domar model (Todaro and Smith 2009).

Theorists of the 1950s and early 1960s viewed the process of development as a sequence of historical stages. This view was popularized by Rostow (Ingham 1995). Building on the historical pattern of the then developed countries, Rostow (1960) claimed that the transition from underdevelopment to development would pass through five stages: the traditional society, the preconditions for take-off, the take-off, the drive to maturity and the age of high mass consumption. The decisive stage is the take-off, through which developing countries are expected to transit from an underdeveloped to a developed state. Increasing rate of investments is considered to be necessary to induce per-capita growth. Like Rostow’s stages growth model, the Harrod–Domar model emphasized that the prime mover of the economy is investments (Ghatak 2003). Every country therefore needs capital to generate investments. The principal strategies of development from the stage approach were commonly used by developing countries in the early post-war years. With a target growth rate, the required saving rate can then be known. If domestic savings were not sufficient, foreign savings would be mobilized.

Although Rostow (1960), Harrod (1948) and Domar (1947) were right about the important role of investments that is most closely correlated with the economic growth rate, this is not the only condition for a country to develop. The key weakness of these models lies in their simplifying assumptions. A single production function is simply assumed for all countries (Adelman 2000). Every economy is assumed to have the same necessary conditions and would pass through the same phasing, stage by stage. But that economic growth path, which historically had been followed by the more developed countries, is not the only one pathway. The development process is actually highly nonlinear (Chenery 1960; Chenery and Syrquin 1975). Countries may pursue distinct development paths (Morris and Adelman 1988). Economies may miss stages, or become locked in one particular stage, or even regress depending on many other complementary factors such as managerial capacities, and the availability of skilled labour for a wide range of development projects (Todaro and Smith 2009).

2.3.2.2 Structural Change Models

During most of the 1960s and early 1970s, economists generally described the development process as structural change by which the reallocation of labour from the agricultural sector to the industrial sector is considered the key source for economic growth. Two well-known representatives of this approach are the two-sector
model (Lewis 1954), and the structural change and patterns of development (Chenery 1960).

In Lewis’ (1954) two-sector model or theory of surplus labour, labour increasingly moves away from the agricultural sector to the industrial sector. However, with unlimited supply of labour from the traditional sector, these transferred workers continually received only subsistence wages. The excess of modern sector profits over wages and hence investments in the modern sector continued to expand and generate further economic growth on the assumption that all profits would be reinvested. Both labour transfer and modern sector employment growth were in turn brought about by output expansion in that sector. This process of modern sector self-sustaining growth and employment expansion facilitated the structural transformation from a traditional subsistence economy to a more modern developed economy to take place. Like the Harrod–Domar model, the Lewis model considered savings and investments to be the driving forces of economic development but in the context of the less developed countries. However, several Lewis’ assumptions are not valid such as those relating to rural surplus labour, and the proportional rate of expansion in capital accumulation in the modern sector (Todaro and Smith 2009).

Although promoting the roles of savings and investments, the structural change and patterns of development analysis extended in comparison with the Lewis model. The analysis identified that the steady accumulation of physical and human capital is among conditions necessary for economic growth, apart from savings and investments. Moreover, the structural changes occurred not only in the two sectors but also in all economic functions, including the change in consumer demand from an emphasis on food and basic necessities to desires for diverse manufactured goods and services, international trade and resource use as well as changes in socioeconomic factors such as urbanization and the growth and distribution of a country’s population. The most significant explanation of this approach was provided by Chenery (1960), Chenery and Taylor (1968), Kuznets (1971) and Chenery and Syrquin (1975).

By focusing on the pattern of development rather than theory, the structural change models may mislead policy-makers. Since the reallocation of labour from the agricultural sector to the industrial sector is considered the engine of economic growth, many developing countries implemented policies that often promote the industry and neglect agriculture. But the negative effects of policies that turned against that vital sector have come to be widely recognized (World Bank 2000). Criticisms of these models were reinforced by the fact that in many developing countries, poverty was prevalent. Following the pattern recommended by structural change economists, in the late 1960s, the attention of policy-makers began to shift towards an emphasis on human capital, i.e. education and health (Meier 2000). Then again, investments in health and education alone do not guarantee development. “In Sub-Saharan Africa, for example, life expectancy and school enrolment rates have increased dramatically in recent decades, but as a group the economies in the region have had slow and even negative growth since the early 1970s” (World Bank 2000, p. 16).

The structural change models focused on the pattern of development and hypothesized that the pattern was similar in all countries and was identifiable. However, empirical works, such as Chenery (1960), Chenery and Taylor (1968),
and Chenery and Syrquin (1975), on the process of structural change does recognize that pattern of development can be different among countries, which is dependent on the countries’ particular set of factors including “a country’s resource endowment and size, its government’s policies and objectives, the availability of external capital and technology, and the international trade environment” (Todaro and Smith 2009, p. 120).

2.3.2.3 International Dependence Models

The international dependence theory was very popular in the 1970s and early 1980s. The dependence theorists argued that underdevelopment exists because of the dominance of developed countries and multinational corporations over developing countries. The theory is considered an extension of Marxist theory (Hein 1992).

The poor countries are said to be dependent on the developed countries for market and capital. However, developing countries received a very small portion of the benefits that the dependent relationship brought about. The unequal exchange, in terms of trade against poor countries, made free trade a convenient vehicle of “exploitation” for the developed countries. Developed countries can exploit national resources of developing countries through getting cheap supply of food and raw materials. Meanwhile, poor countries are unable to control the distribution of the value added to the products traded between themselves and the developed countries (Cohen 1973; Dos Santos 1973). The growth of international capitalism and multinational corporations caused poor countries to be further exploited and more dependent on the developed countries. Poor countries therefore could not expect sustained growth from that dependence. Following the international dependence theory, developing countries should therefore end the dependence by breaking up their relationships with the developed world, as well as by closing their doors on the developed countries (Elkan 1995; Ghatak 2003; Ferraro 2008).

The models gained increasing support among the developing countries because of the limited results of the stages and structural change models. However, the failures of the model were clearly reflected in the developing countries that followed the autarky policy. These countries often experienced stagnant growth and finally decided to open their economies once again such as China, Tanzania and India (Ferraro 2008; Todaro and Smith 2009). Meanwhile, the experience of the newly industrialized economies of East Asia, namely Hong Kong, Singapore, Taiwan and South Korea, during the 1970s and 1980s showed that their success had been the result of emphasizing trade with the advanced industrial countries. The negative impacts of the policy of autarky rendered the theory out of favour in the 1980s (Hein 1992; Ferraro 2008).

2.3.2.4 Neoclassical Counter-Revolution Models

In the 1980s, neoclassical counter-revolution economists used three approaches, namely the free market approach, the new political economy approach and the
market-friendly approach, to counter the international dependence model. In contrast with the international dependence model, these approaches mainly argued that underdevelopment is not the result of the predatory activities of the developed countries and the international agencies but was rather caused by the domestic issues arising from heavy state intervention such as poor resource allocation, government-induced price distortions and corruption (Meier 2000). As a response to public sector inefficiency, economists of the counter-revolution thinking, for example Bauer (1984), Lal (1983), Johnson (1971), and Little (1982), focused on promoting free markets, eliminating government-imposed distortions associated with protectionism, subsidies and public ownership.

Another strand of neoclassical free market thoughts called the traditional neoclassical growth theory actually originated from the Harrod–Domar and Solow models. Expanding the Harrod–Domar formulation, Solow neoclassical growth model stresses the importance of three factors of output growth: increases in labour quantity and quality (through population growth and education), increases in capital (through savings and investments) and improvements in technology (Solow 1956). Technological change in Solow’s model is provided exogenously. Thus, with the same provided rate of technological progress, the growth rate would be expected to converge across countries. By opening up national markets, developing countries can draw additional domestic and foreign investments, thus increasing the rate of capital accumulation and returns on investments. Consequently, developing countries tend to converge to higher per-capita income levels (World Bank 2000).

Neoclassical economists focused on the market to find a way out for the developing countries. Policies of liberalization, stabilization and privatization therefore become the central elements of the national development agenda. Foreign trade, private international investments and foreign aid flowing into the developing countries are expected to accelerate economic efficiency and economic growth of these countries. Empirically, the models, however, did not bring about the expected results. The growth rates per capita have diverged among countries (Azariadis and Drazen 1990). Several African countries focusing on these issues achieved an average growth rate of only 0.5% per year. With weak and inadequate legal and regulatory framework, not to mention the different institutional, cultural and historical context of the developing countries, free market in these countries fails to stimulate economic development (World Bank 2000).

2.3.3 Contemporary Theories of Economic Development

2.3.3.1 New Growth Theory

Endogenous growth or the new growth theory emerged in the 1990s to explain the poor performance of many less developed countries, which have implemented policies as prescribed in neoclassical theories. Unlike the Solow model that considers technological change as an exogenous factor, the new growth model notes
that technological change has not been equal nor has it been exogenously transmitted in most developing countries (World Bank 2000).

New growth theorists (Romer 1986; Lucas 1988; Aghion and Howitt 1992) linked the technological change to the production of knowledge. The new growth theory emphasizes that economic growth results from increasing returns to the use of knowledge rather than labour and capital. The theory argues that the higher rate of returns as expected in the Solow model is greatly eroded by lower levels of complementary investments in human capital (education), infrastructure, or research and development (R&D). Meanwhile, knowledge is different from other economic goods because of its possibility to grow boundlessly. Knowledge or innovation can be reused at zero additional cost. Investments in knowledge creation therefore can bring about sustained growth. Moreover, the knowledge could create the spillover benefits to other firms once they obtained the knowledge. However, markets failed to produce enough knowledge because individuals cannot capture all of the gains associated with creating new knowledge by their own investments. Policy intervention is thus considered necessary to influence growth in the long term. The new growth models therefore promote the role of government and public policies in complementary investments in human capital formation and the encouragement of foreign private investments in knowledge-intensive industries such as computer software and telecommunications (Meier 2000).

Although the new growth theory helps to explain the divergence in growth rates across economies, it was criticized for overlooking the importance of social and institutional structures (Skott and Auerbach 1995). Its limited applicability lies in its assumptions. For example, it treats the economy as a single firm that does not permit the crucial growth-generating reallocation of labour and capital within the economy during the process of structural change. Moreover, there are many other factors which provide the incentives for economic growth that developing countries lack such as poor infrastructure, inadequate institutional structures and imperfect capital and goods markets (Cornwall and Cornwall 1994). Policy-makers will therefore need to pay careful attention to all of the factors that determine the changes and their impacts on the aggregate growth rate.

2.3.3.2 Theory of Coordination Failure

The foundation of the theory of coordination failure is the idea that the market may fail to achieve coordination among complementary activities. When complementaries exist, that is when returns of one investment depend on the presence or extent of other investments, there exist two scenarios. On the one hand, optimally, all investors as a whole are better off with all investments to be achieved at the same time. On the other hand, it would not make sense for an investor to take similar actions when he believes that others may not do the same as well. The market is said to have failed to coordinate investors’ actions in this way. Coordination failure therefore leads the market to an (equilibrium) outcome inferior to a potential situation in which
resources would be optimally allocated and all agents would be better off. As a result, underdevelopment equilibrium is possible (Hoff and Stiglitz 2000).

The theory of coordination failure became influential in the 1990s. However, it has a history of more than half a century. Coordination issues among complementary industries were first raised by Rosenstein-Rodan (1943). Like Rosenstein-Rodan (1943), early coordination failures economists Nurkse (1953) and Hirschman (1957) emphasized the role of the government to solve the problem. In order to reach an optimal level of coordination, the policy they recommended was a “big push”—a public-led massive investment program—which can cause complementarities to take place in the rest of the economy.

Like other early development models, “big push” strategies ran out of favour when the world witnessed the collapse of centrally planned economies and the slow growth, stagnation or worst results of state-led industrialization in the underdeveloped countries (Meier 2000). However, development economists have recently returned to emphasize the problem of complementarities between several conditions necessary for successful development to take place (Glăvan 2008). Hoff (2000), and Bowles Durlauf and Hoff (2006) described the economy as an ecosystem where the behaviour of one can affect the others’. The coordination failure among many different individuals lead the economy to multiple equilibria, but not all of them are good for every member of the economy, and some in fact are very undesirable. As a result, the market fails to coordinate everyone to achieve the optimal equilibrium. In other words, “A firm’s productivity depends not only on its own efforts, and abilities, and on general economic conditions (for example, the macroeconomic environment and the legal system), but also on the actions of other firms, infrastructure, regulation and other public goods” (Rodriguez-Clare 2005, p. 3). In a similar vein, Rodrik (2004) also indicated that success or failure of an action could depend on its milieu.

In a market mechanism, there are uncertainties that a good equilibrium can be obtained. A bad equilibrium can exist when firms have pessimistic expectations and thus show their reluctance to invest, and consequently fail to coordinate their businesses. “And whereas in the past we thought the implication was that the economy would be slightly distorted, we now understand that the interaction of these slightly distorted behaviours may produce very large distortions. The consequence is that there may be multiple equilibria and that each may be inefficient” (Hoff and Stiglitz 2000, p. 390). The existence of coordination failure cannot therefore be disputed and has become important. When the market mechanism does not work, the active roles of the government need to be highlighted. According to coordination failure economists, in the multiple equilibria circumstances described above, the government can coordinate firms to move them into the domain of good equilibrium.

The theory of coordination failures offers some important overall lessons for policy-makers. The theory often highlights the problems of market failure that require selective government intervention to ensure that several things work well together at the same time. However, to get sustainable development underway is obviously not an easy task. The “big push” strategy is recommended recently by United Nations Development Programme (2005). The programme suggests that for
developing countries to break out of the poverty trap, a big push of basic investments between now and 2015 in public administration, human capital and key infrastructure is necessary (United Nations Development Programme 2005). However, the theory of coordination failure has been criticized for its overemphasis on the roles of government. Critics have asserted that the government is ineffective and could choose a bad policy (Killick 1976; Hoff and Stiglitz 2000). If a bad policy is implemented, it can push an economy into a bad equilibrium for years to come and even into a worse equilibrium than the one with which the country began (Hoff and Stiglitz 2000). Moreover, the policies recommended by coordination failure models lacked details of how the government can coordinate the economy. Policy-makers therefore need to be more cautious of these strategies to address coordination failure issues. The theory is further discussed in Chap. 5.

2.4 Summary

The review of the literature shows that there is increasingly a consensus that economic development is a multidimensional process that involves interactions among different goals of development and therefore would require systematically designed policies and strategies. Development issues are complex and multifaceted. There is no one single pathway for economic development that all countries can pursue. In the long term, the economic development process requires changes in policies to account for new emerging factors and trends. Designing these economic development policies also need to take into consideration the social, cultural, political systems and institutions as well as their changing interaction over time in a country.

Development strategies have changed remarkably over the past half century. Classical development economists often see underdevelopment as having a single cause. But history has demonstrated that focusing on one single factor alone cannot guarantee success in the development process. Capital formation (as emphasized in the linear stage growth models) is necessary but not sufficient. Structural change models that promoted industry but neglected agriculture also did not bring about the expected results. The international dependence models pursued an inward-looking model of development that promoted state-run production. On the contrary, the neoclassical free market counter-revolution is a different strand of thought that supported the role of the free market, privatization and export expansion. However, the contemporary models of development see the government and the market as complements, in which a certain extent of government intervention is required to ensure that desirable outcomes can be achieved in the presence of related market failures. These changes in development thoughts are shown in Fig. 2.1.

Although the ultimate goal of economic development goes beyond the growth of gross income (GDP, GNP or GNI) per capita, an understanding of the sources of growth is essential to achieve other objectives. Economic development is about growth plus organizational change (Hoff and Stiglitz 2000). Without growth, the change is unlikely to occur, since a country needs resources to realize other long-
term objectives. Growth and change will thus continue to be central to any development strategy.

The critical knowledge in finding the source of growth has been closely related to capital formation. However, as reviewed previously, the major weakness of the early theories is that they focused on finding the constraints in capital formation of one factor, such as physical capital or human capital, that limit economic growth. Hence, their solution is simply to increase investments in the factor identified. History has shown that the solution to a single cause does not always guarantee successful economic development. The solution is not simply an increase in that capital. More importantly, the focus should be on how to use the capital in an economy that consists of a combination of interrelated production processes. As recently realized by the contemporary development economists, especially by the theorists of coordination failures, the solution to obtain sustainable development underway is to make sure that several things work well simultaneously. Economic development is a complex process which involves causal relationships. One cannot risk overlooking these relationships as they lie at the centre of the development process. The theory of coordination failure thus served as a theoretical basis for connecting growth, trade and infrastructure construction later in this study. The theory itself is further discussed in Chap. 5.

Goals of development:
- Growth (of gross income per capita);
- Improvement in quality of life;
- Sustainable development;
- The Millennium Development Goals.

Development thoughts (prime movers of economic development):
- Early views:
  - Capitalism: free trade, private property and competition (Smith, 1776); and
  - Communism: social or public ownership of property, and independence of foreign capital and goods (Marx, 1933).
- Classical theories:
  - The linear-stages-of-growth models: savings and investments (Rostow, 1960; Harrod, 1948; Domar, 1947);
  - Structural-change models: transferring resources from low to high-productivity activities (from traditional/agricultural to modern /industrial sector) (Lewis, 1954; Chenery, 1960);
  - International-dependence models: withdrawal from the international economy and pursuit of self-sufficiency or autarky; and
  - Neoclassical counter-revolution models: liberalization, stabilization, and privatization.
- Contemporary theories:
  - New growth theory: knowledge or innovation;
  - Theory of coordination failure:
    - Underdevelopment as a coordination failure among complementary activities; and
    - Government intervention to move the economy to a preferred equilibrium.

Fig. 2.1 The evolution of development thoughts
References


