

also coming to be more appreciated. Not only do the private and public sectors work together constructively surprisingly often, but the lines between the sectors are not always sharp. Indeed, as pointed out by Elinor Ostrom, 2009 Nobel laureate in economics, we must appreciate that some phenomena “do not fit in a dichotomous world of ‘the market’ and ‘the state.’”¹

In this chapter, we examine the roles and limitations of planning and development policymaking as practiced in developing nations, consider the problems of economic transition to more competitive market economies, and ask fundamental questions as to the proper role of the state and how public and private economic activity can best be made mutually supporting. We start with a brief review of the nature of development planning and a summary of general planning issues. After examining the main arguments for and against the role of planning in developing societies and briefly reviewing different models of planning and project appraisal, we examine the requirements of economic transition to market economies and evaluate the arguments for and against the role of the state in contemporary developing nations.

In particular, we examine the once-dominant “Washington consensus” on development policy and its limitations and discuss ongoing progress toward an emerging new consensus. Then we examine some recent theories of development policy formulation, including studies of the impact of political processes on the quality of policy decisions. We next examine three important trends in governance and reform: tackling the problem of corruption, implementing decentralization, and encouraging broad-based development participation. Finally, we examine the nature of the third sector—the civil society or citizen sector, encompassing NGOs—and its growing role in economic development. The chapter concludes with a case study of the largest developing country-based development NGO, BRAC of Bangladesh, which is now also working in several other low-income countries.



11.2 Development Planning: Concepts and Rationale

The Planning Mystique

In the initial decades after the Second World War and decolonization, the pursuit of economic development was reflected in the almost universal acceptance of development planning as the surest and most direct route to economic progress. Until the 1980s, few people in the developing world would have questioned the advisability or desirability of formulating and implementing a national development plan. Planning had become a way of life in government ministries, and every five years or so, the latest development plan was paraded out with great fanfare.

National planning was widely believed to offer the essential and perhaps the only institutional and organizational mechanism for overcoming the major obstacles to development and for ensuring a sustained high rate of economic growth. To catch up with their former rulers, poor nations were persuaded that they required a comprehensive national plan. The planning record, unfortunately, did not live up to its advance billing. But a comprehensive development

policy framework can play an important role in accelerating growth, reducing poverty, and reaching human development goals.

The Nature of Development Planning

Economic planning may be described as a deliberate governmental attempt to coordinate economic decision making over the long run and to influence, direct, and in some cases even control the level and growth of a nation's principal economic variables (income, consumption, employment, investment, saving, exports, imports, etc.) to achieve a predetermined set of development objectives.² An **economic plan** is simply a specific set of quantitative economic targets to be reached in a given period of time, with a stated strategy for achieving those targets. Economic plans may be comprehensive or partial. A **comprehensive plan** sets its targets to cover all major aspects of the national economy. A **partial plan** covers only a part of the national economy—industry, agriculture, the public sector, the foreign sector, and so forth. Finally, the **planning process** itself can be described as an exercise in which a government first chooses social objectives, then sets various targets, and finally organizes a framework for implementing, coordinating, and monitoring a development plan.³

Proponents of economic planning for developing countries argued that the uncontrolled market economy can, and often does, subject these nations to economic dualism, unstable markets, low investment in key sectors, and low levels of employment. In particular, they claimed that the market economy is not geared to the principal operational task of poor countries: mobilizing limited resources in a way that will bring about the structural change necessary to stimulate a sustained and balanced growth of the entire economy. Planning came to be accepted, therefore, as an essential and pivotal means of guiding and accelerating economic growth in almost all developing countries.

Planning in Mixed Developing Economies

Most development plans have been formulated and carried out within the framework of the mixed economies of the developing world. These economies are characterized by the existence of an institutional setting in which some of the productive resources are privately owned and operated and some are controlled by the public sector. The actual proportionate division of public and private ownership and control varies from country to country, and neither the private nor the public sector can really be considered in isolation from the other. However, mixed economies are often distinguished by a substantial amount of government ownership and control. The private sector in developing countries typically comprises four traditional forms of private ownership and a more recent emerging one:

1. The subsistence sector, consisting of small-scale private farms and handicraft shops selling a part of their production to local markets
2. Small-scale individual or family-owned commercial business and service activities in the formal and informal urban sectors

Economic planning A deliberate and conscious attempt by the state to formulate decisions on how the factors of production shall be allocated among different uses or industries, thereby determining how much of total goods and services shall be produced in one or more ensuing periods.

Economic plan A written document containing government policy decisions on how resources shall be allocated among various uses so as to attain a targeted rate of economic growth or other goals over a certain period of time.

Comprehensive plan An economic plan that sets targets to cover all the major sectors of the national economy.

Partial plan A plan that covers only a part of the national economy (e.g., agriculture, industry, tourism).

Planning process The procedure for drawing up and carrying out a formal economic plan.

3. Medium-size commercial enterprises in agriculture, industry, trade, and transport owned and operated by local entrepreneurs
4. Large jointly owned or completely foreign-owned manufacturing enterprises, mining companies, and plantations, catering primarily to foreign markets but sometimes with substantial local sales (the capital for such enterprises usually comes from abroad, and a good proportion of the profits tends to be transferred overseas)
5. A growing number of relatively large, domestic-based firms, primarily locally managed and largely locally owned, often listed on national stock markets in countries such as Brazil, Russia, India, and China but much more common in middle-income than low-income countries and rare in the least developed countries

In the context of such an institutional setting, we can identify two principal components of development planning in mixed economies:

1. The government's deliberate use of domestic saving and foreign finance to carry out public investment projects and to mobilize and channel scarce resources into areas that can be expected to make the greatest contribution toward the realization of long-term economic objectives (e.g., the construction of railways, schools, hydroelectric projects, and other components of **economic infrastructure**, as well as the creation of import-substituting industries or projected future export sectors)
2. Governmental economic policy (e.g., taxation, industrial licensing, the setting of tariffs, and the manipulation of quotas, wages, interest rates, and prices) to stimulate, direct, and in some cases even control private economic activity so as to ensure a harmonious relationship between the desires of private business operators and the social objectives of the central government

Thus even when development planning is quite active, there is almost always a balance between the extremes of market inducement and central control, as is readily evident from our simplified characterization of planning in mixed market economies.

The Rationale for Development Planning

The early widespread acceptance of planning as a development tool rested on a number of fundamental economic and institutional arguments. Of these we can single out four as the most often put forward.

Market Failure Markets in developing economies are permeated by imperfections of structure and operation. Commodity and factor markets are often badly organized, and the existence of distorted prices often means that producers and consumers are responding to economic signals and incentives that are a poor reflection of the real cost to society of these goods, services, and resources. It is therefore argued that governments have an important role to play in integrating markets and modifying prices. Moreover, the failure of the

Economic infrastructure

The capital embodied in roads, railways, waterways, airways, and other forms of transportation and communication plus water supplies, electricity, and public services such as health and education.

market to price factors of production correctly is further assumed to lead to gross disparities between social and private valuations of alternative investment projects. In the absence of governmental interference, therefore, the market is said to lead to a misallocation of present and future resources or, at least, to an allocation that may not be in the best long-run social interests. This **market failure** argument is perhaps the most often quoted reason for the expanded role of government in less developed countries.⁴

Various kinds of market and government failures are examined in several of the earlier chapters, but a brief review is in order here. There are three general forms in which market failure can be observed: The market cannot function properly or no market exists; the market exists but implies an inefficient allocation of resources; the market produces undesirable results as measured by social objectives other than the allocation of resources. Market failures can occur in situations in which social costs or benefits differ from the private costs or benefits of firms or consumers; public goods, externalities, and market power are the best-known examples. With public goods, “free riders” who do not pay for the goods cannot be excluded except at high cost; it is economically inefficient to exclude nonpaying individuals from consuming these goods. With externalities, consumers or firms do not have to pay all the costs of their activities or are unable to receive all the benefits. Coordination failures occur when several agents would be better off if they could cooperate on actions if all or most agents participate but worse off taking the action if too few participate. Moreover, economic development is a process of structural change. The market may be efficient in allocating resources at the margin, allowing certain industries to emerge and others to fail, but may be ineffective in producing large discontinuous changes in the economic structure that may be crucial to the country’s long-term development (see Chapter 4).⁵ Market power occurs when firms can influence price by restricting quantity, a power most common under increasing returns to scale. Capital markets are particularly prone to failure due to their intrinsic connection to information generation and transmittal; information has public-good properties (see Chapter 15). A more equal distribution of income itself can be considered a public good when it is an agreed social objective. There may be concern for the well-being of future generations, who cannot participate in today’s economic or political markets. Merit goods, such as health, education, and basic welfare, can also be considered public goods or social entitlements guaranteed by government. But concerns about distribution and merit goods are often treated as separate rationales for policy because their levels are generally viewed as outside the realm of economic efficiency.

Unfortunately, we cannot jump to the conclusion that if economic theory says policy can fix market failures, it will do so in practice. Government failure may also occur in the many cases in which politicians, bureaucrats, and the individuals or groups who influence them give priority to their own private interests rather than the public interest. Analysis of incentives for government failure helps guide reforms such as constitution design and civil service rules. Developing countries tend to have both high market failure and government failure.⁶ (As noted later in the chapter, the NGO sector can also be subject to what is termed voluntary failure, for several reasons).

Market failure A phenomenon that results from the existence of market imperfections (e.g., monopoly power, lack of factor mobility, significant externalities, lack of knowledge) that weaken the functioning of a market economy.

Resource Mobilization and Allocation This argument stresses that developing economies cannot afford to waste their very limited financial and skilled human resources on unproductive ventures. Investment projects must be chosen not solely on the basis of partial productivity analysis dictated by individual industrial capital-output ratios but also in the context of an overall development program that takes account of external economies, indirect repercussions, and long-term objectives. Skilled workers must be employed where their contribution will be most widely felt. Economic planning is assumed to help by recognizing the existence of particular constraints and by choosing and coordinating investment projects so as to channel these scarce factors into their most productive outlets. In contrast, it is argued, competitive markets will tend to generate less investment and to direct that investment into areas of low social priority (e.g., consumption goods for the rich).

Attitudinal or Psychological Impact It is often assumed that a detailed statement of national economic and social objectives in the form of a specific development plan can have an important attitudinal or psychological impact on a diverse and often fragmented population. It may succeed in rallying the people behind the government in a national campaign to eliminate poverty, ignorance, and disease or to boost national prowess. By mobilizing popular support and cutting across class, caste, racial, religious, or tribal factions with the plea to all citizens to work together toward building the nation, it is argued that an enlightened central government, through its economic plan, can best provide the needed incentives to overcome the inhibiting and often divisive forces of sectionalism and traditionalism in a common quest for widespread material and social progress.

Foreign Aid The formulation of detailed development plans has often been a necessary condition for the receipt of bilateral and multilateral foreign aid. With a shopping list of projects, governments are better equipped to solicit foreign assistance and persuade donors that their money will be used as an essential ingredient in a well-conceived and internally consistent plan of action.

11.3 The Development Planning Process: Some Basic Models

Three Stages of Planning

Most development plans have traditionally been based initially on some more or less formalized macroeconomic model. Such economywide planning models can be divided into two basic categories: (1) aggregate growth models, involving macroeconomic estimates of planned or required changes in principal economic variables, and (2) multisector input-output, social accounting, and computable general equilibrium (CGE) models, which ascertain (among other things) the production, resource, employment, and foreign-exchange implications

of a given set of final demand targets within an internally consistent framework of interindustry product flows. Finally, probably the most important component of plan formulation is the detailed selection of specific investment projects within each sector through the technique of project appraisal and social cost-benefit analysis. These three “stages” of planning—aggregate, sectoral, and project—provided the main intellectual tools of the planning authority. All of these tools have been, and still are, extensively used by the World Bank and other development agencies, as well as developing country governments. We now turn to examine each of these stages and their associated models.

Aggregate Growth Models: Projecting Macro Variables

The first and most elementary planning model used in almost every developing country is the **aggregate growth model**. It deals with the entire economy in terms of a limited set of macroeconomic variables deemed most critical to the determination of levels and growth rates of national output: savings, investment, capital stocks, exports, imports, foreign assistance, and so on. Aggregate growth models provide a convenient method for forecasting output (and perhaps also employment) growth over a three- to five-year period. Almost all such models represent some variant of the basic Harrod-Domar (or AK) model described in Chapter 3.

Given targeted GDP growth rates and a national capital-output ratio, the Harrod-Domar model is used to specify the amount of domestic saving necessary to generate such growth. Typically, this necessary amount of domestic saving is not likely to be realized on the basis of existing savings functions, and so the basic policy problem of how to generate additional domestic savings or foreign assistance comes into play. For planning purposes, the Harrod-Domar model has been typically formulated along the following lines.⁷

We start with the assumption that the ratio of total output to reproducible capital is constant so that

$$K(t) = cY(t) \quad (11.1)$$

where $K(t)$ is capital stock at time t , $Y(t)$ is total output (GDP) at time t , and c is the average (equal to the marginal) capital-output ratio. We assume next that a constant share (s) of output (Y) is always saved (S), so that

$$I(t) = K(t + 1) - K(t) + \delta K(t) = sY = S(t) \quad (11.2)$$

where $I(t)$ is gross investment at the time t and δ is the fraction of the capital stock depreciated in each period. Now if g is the targeted rate of growth of output such that

$$g = \frac{Y(t + 1) - Y(t)}{Y(t)} = \frac{\Delta Y(t)}{Y(t)} \quad (11.3)$$

then capital must be growing at the same rate because from Equation 11.1 we know that

$$\frac{\Delta K}{K} = \frac{c\Delta Y}{K} = \frac{(K/Y)\Delta Y}{K} = \frac{\Delta Y}{Y} \quad (11.4)$$

Aggregate growth model

A formal economic model describing growth of an economy in one or a few sectors using a limited number of variables.

Using Equation 11.2, we therefore arrive once again at the basic Harrod-Domar growth formula (with the capital depreciation parameter):

$$g = \frac{sY - \delta K}{K} = \frac{s}{c} - \delta \quad (11.5)$$

Finally, because output growth can also be expressed as the sum of labor force growth (n) and the rate of growth of labor productivity (p), Equation 11.5 can be rewritten for planning purposes as

$$n + p = \frac{s}{c} - \delta \quad (11.6)$$

Of course, much development policymaking does not take productivity as exogenous but is actively focused on raising it. But given an expected rate of labor force and productivity growth (labor force growth can be calculated from readily available demographic information, and productivity growth estimates are usually based either on extrapolations of past trends or on an assumed constant rate of increase), Equation 11.6 can then be used to estimate whether domestic savings will be sufficient to provide an adequate number of new employment opportunities to a growing labor force. One way of doing this is to disaggregate the overall savings function ($S = sY$) into at least two component sources of saving, normally, the propensity to save out of wage income, W , and profit income, π . Thus we define

$$W + \pi = Y \quad (11.7)$$

and

$$s_\pi \pi + s_W W = I \quad (11.8)$$

where s_π and s_W are the savings propensities from π and W , respectively. By manipulating Equation 11.5 and substituting Equations 11.7 and 11.8 into it, we arrive at a modified Harrod-Domar growth equation:

$$c(g + \delta) = (s_\pi - s_W) \left(\frac{\pi}{Y} \right) + s_W \quad (11.9)$$

which can then serve as a formula for ascertaining the adequacy of current saving out of profit and wage income. For example, if a 4% growth rate is desired and if $\delta = 0.03$, $c = 3.0$, and $\pi/Y = 0.5$, Equation 11.9 reduces to $0.42 = s_\pi + s_W$.⁸ If savings out of capital income amount to 25%, wage earners must save at a 17% rate to achieve the targeted rate of growth. In the absence of such a savings rate out of labor income, the government could pursue a variety of policies to raise domestic saving or seek foreign assistance.

In countries where inadequate foreign-exchange reserves are believed to be the principal constraint on economic growth, the aggregate growth model typically employed is some variant of the two-gap model, which will be described, along with their limits, in Chapter 14. (Two-gap models are simply Harrod-Domar models generalized to take foreign-trade problems into account.) In either case, aggregate growth models can provide only a rough first approximation of the general directions an economy might take. Thus they rarely constitute the operational development plan. Perhaps more important,

the simplicity and relatively low data collection cost of using aggregate growth models can often blind us to their very real limitations, especially when carried out in too mechanical a fashion. Average capital-output ratios are notoriously difficult to estimate and may bear little relation to marginal capital-output ratios, which are the relevant ratios for forecasting purposes, and savings rates can be highly unstable. The operational plan requires a more disaggregated multisector model of economic activity like the well-known input-output approach.

Multisector Models and Sectoral Projections

A much more sophisticated approach to development planning is to use some variant of the **interindustry** or **input-output model**, in which the activities of the major industrial sectors of the economy are interrelated by means of a set of simultaneous algebraic equations expressing the specific production processes or technologies of each industry. All industries are viewed both as producers of outputs and users of inputs from other industries. For example, the agricultural sector is both a producer of output (e.g., wheat) and a user of inputs from, say, the manufacturing sector (e.g., machinery, fertilizer). Thus direct and indirect repercussions of planned changes in the demand for the products of any one industry on output, employment, and imports of all other industries can be traced throughout the entire economy in an intricate web of economic interdependence. Given the planned output targets for each sector of the economy, the interindustry model can be used to determine intermediate material, import, labor, and capital requirements with the result that a comprehensive economic plan with mutually consistent production levels and resource requirements can, in theory, be constructed.

Interindustry models range from simple input-output models, usually consisting of 10 to 30 sectors in the developing economies and 30 to 400 sectors in advanced economies, to more complicated linear programming or activity analysis models where checks of feasibility (what is possible given certain resource constraints) and optimality (what is best among different alternatives) are also built into the model. But the distinguishing characteristic of the interindustry or input-output approach is the attempt to formulate an internally consistent, comprehensive development plan for the entire economy.⁹

Input-output analysis is often extended in two ways. First, by including data on factor payments, sources of household income, and the pattern of household goods consumption across various social groups (such as urban and rural households), a social accounting matrix (SAM) is created. This is accomplished by adding data from the system of national accounts, balance of payments, and flow-of-funds databases, often supplemented with household survey data, to the basic input-output table. A SAM therefore provides a comprehensive and detailed quantitative description of the interrelationships in an economy as they exist at a point in time, making it well suited as a tool for evaluating the impact of alternative development policies. SAMs for many countries can be found online. SAMs are often further elaborated with computable general equilibrium (CGE) models, which assume that households maximize utility and firms maximize profits. Utility (or demand) and production functions are assumed or estimated from national data. The resulting impact

Input-output model (interindustry model) A formal model dividing the economy into sectors and tracing the flow of interindustry purchases (inputs) and sales (outputs).

of the policy is then simulated using standard computer programs. The CGE approach is more complicated than a SAM, but its value lies in enabling policymakers to take into account the possible reactions of consumers and firms to the alternative policies being considered rather than assume that they will behave the way they did before the new policies were implemented.¹⁰

Project Appraisal and Social Cost-Benefit Analysis

Project appraisal The quantitative analysis of the relative desirability (profitability) of investing a given sum of public or private funds in alternative projects.

The vast majority of day-to-day operational decisions with regard to the allocation of limited public investment funds are based on a microeconomic technique of analysis known as **project appraisal**. The intellectual as well as the operational linkage among these three major planning techniques, however, should not be overlooked. Macro growth models set the broad strategy, input-output analysis ensures an internally consistent set of sectoral targets, and project appraisal is designed to ensure the efficient planning of individual projects within each sector.

Cost-benefit analysis A tool of economic analysis in which the actual and potential private and social costs of various economic decisions are weighed against actual and potential private and social benefits.

Basic Concepts and Methodology The methodology of project appraisal rests on the theory and practice of social **cost-benefit analysis**,¹¹ which is also used in the United States and other developed countries. The basic idea of cost-benefit analysis is simple: To decide on the worth of projects involving public expenditure (or, indeed, in which public policy can play a crucial role), it is necessary to weigh the advantages (benefits) and the disadvantages (costs) to society as a whole. The need for social cost-benefit analysis arises because the normal yardstick of commercial profitability that guides the investment decisions of private investors may not be an appropriate guide for public-investment decisions. Private investors are interested in maximizing private profits and therefore normally take into account only the variables that affect net profit: receipts and expenditures. Both receipts and expenditures are valued at prevailing market prices for inputs and outputs.

The point of departure for social cost-benefit analysis is that it does not accept that actual receipts are a true measure of social benefits or that actual expenditures are a true measure of social costs. Not only will actual market prices often diverge from their true value, but private investors also do not take into account the external effects of their decisions. These externalities can be sizable and pervasive.¹² In other words, where social costs and benefits diverge from private costs and benefits, investment decisions based entirely on the criterion of commercial profitability may lead to wrong decisions from the point of view of social welfare, which should be the government's primary concern. Although social valuations may differ significantly from private valuations, the practice of cost-benefit analysis is based on the assumption that these divergences can be adjusted for by public policy so that the difference between social benefit and cost will properly reflect social profitability just as the difference between actual receipts and expenditures measures the private profitability of an investment.

Social profit The difference between social benefits and social costs, both direct and indirect.

Thus we can define **social profit** in any period as the difference between social benefits and social costs where these are measured both directly (the real costs of inputs and the real value of outputs) and indirectly (e.g., employment effects, distributional effects). The calculation of the social profitability of an investment is then a three-step process.¹³

1. We must first specify the objective function to be maximized—ordinarily, net social benefit—with some measure of how different benefits (e.g., per capita consumption, income distribution) are to be calculated and what the trade-off between them might be.
2. To arrive at calculations of net social benefit, we need social measures of the unit values of all project inputs and outputs. Such social measures are often called **accounting prices** or **shadow prices** of inputs and outputs to distinguish them from actual **market prices**.¹⁴ In general, the greater the divergence between shadow and market prices, the greater the need for social cost-benefit analysis in arriving at public investment decision rules.
3. Finally, we need some decision criterion to reduce the stream of projected social benefit and cost flows to an index, the value of which can then be used to select or reject a project or to rank it relative to alternative projects.

Shadow prices (or accounting prices) Prices that reflect the true opportunity costs of resources.

Market prices Prices established by demand and supply in markets.

Let us briefly examine each of these steps of project appraisal.

Setting Objectives Given the difficulty of attaching numerical values to such objectives as national cohesion, self-reliance, political stability, modernization, and quality of life, economic planners typically measure the social worth of a project in terms of the degree to which it contributes to the net flow of future goods and services in the economy—that is, by its impact on future levels of consumption.

Recently, a second major criterion, the project's impact on income distribution, has received increased attention. If preference is to be given to raising the consumption standards of low-income groups, the social worth of a project must be calculated as a weighted sum of the distribution of its benefits, where additional consumption by low-income groups may receive a disproportionately high weight in the social welfare objective function. (This procedure is analogous to that of constructing a poverty-weighted index of economic growth, discussed in Appendix 5.2.) Beginning in 1991, project analysis at the World Bank also included an environmental impact evaluation as a third criterion, along with future consumption and income distribution.

Computing Shadow Prices and Social Discount Rates The core of social cost-benefit analysis is the calculation or estimation of the prices to be used in determining the true value of benefits and the real magnitude of costs. There are many reasons for believing that in developing countries, market prices of outputs and inputs do not give a true reflection of social benefits and costs. Five such reasons, in particular, are often cited.

1. *Inflation and currency overvaluation.* Many developing countries are still beset by inflation and varying degrees of price controls. Controlled prices do not typically reflect the real opportunity cost to society of producing these goods and services. Moreover, in many countries, the government manages the price of foreign exchange. With inflation and unaltered foreign **exchange rates**, the domestic currency becomes overvalued (see Chapters 12 and 13), with the result that import prices underestimate the real cost to the country of

Exchange rate Rate at which the domestic currency may be converted into (sold for) a foreign currency such as the U.S. dollar.

purchasing foreign products and export prices (in local currency) understate the real benefit accruing to the country from a given volume of exports. Bubbles and crises can also lead to larger distortions. Public investment decisions based on this price will therefore tend to be biased against export industries and to favor import substitutions. The reverse holds with systematically undervalued exchange rates.

2. *Wage rates, capital costs, and unemployment.* Almost all developing countries exhibit factor price distortions resulting in modern-sector wage rates exceeding the social opportunity cost (or shadow price) of labor and interest rates understating the social opportunity cost of capital. This leads to widespread unemployment and underemployment and the excessive capital intensity of industrial production technologies. If governments were to use unadjusted market prices for labor and capital in calculating the costs of alternative public investment projects, they would underestimate the real costs of capital-intensive projects and tend to promote these at the expense of the socially less costly labor-intensive projects more favorable to the poor.

3. *Tariffs, quotas, subsidies, and import substitution.* The existence of high tariffs, in combination with import quotas and overvalued exchange rates, discriminates against the agricultural export sector and favors the import-substituting manufacturing sector (see Chapter 12). It also encourages socially wasteful **rent seeking** on the part of competing exporters and importers. They vie with each other (often through bribes and threats as well as direct lobbying efforts) to capture the extra profits that can accrue to traders with import licenses, export subsidies, tariff protection, and industrial preferences.

4. *Savings deficiency.* Given the substantial pressures for providing higher immediate consumption levels to the masses of poor people, the level and rate of domestic savings in most developing countries is often thought to be sub-optimal. According to this argument, governments should use a discount rate that is lower than the market rate of interest in order to promote projects that have a longer payoff period and generate a higher stream of investible surpluses in the future.¹⁵

5. *The social rate of discount.* In our discussion of the shadow price of savings, we mentioned the need for governments to choose appropriate discount rates in calculating the worth of project benefits and costs that occur over time. The **social rate of discount** (also sometimes referred to as *social time preference*) is essentially a price of time—the rate used to calculate the **net present value** of a time stream of project benefits and costs where the net present value (NPV) is calculated as

$$\text{NPV} = \sum_t \frac{B_t - C_t}{(1 + r)^t} \quad (11.10)$$

where B_t is the expected benefit of the project at time t , C_t is the expected cost (both evaluated using shadow prices), and r is the government's social rate of discount. Social discount rates may differ from market rates of interest (normally used by private investors to calculate the profitability of investments), depending on the subjective evaluation placed on future net benefits: The

Rent seeking Efforts by individuals and businesses to capture the economic rent arising from price distortions and physical controls caused by excessive government intervention, such as licenses, quotas, interest rate ceilings, and exchange control.

Social rate of discount The rate at which a society discounts potential future social benefits to find out whether such benefits are worth their present social cost.

Net present value The value of a future stream of net benefits discounted to the present by means of an appropriate discount (interest) rate.

higher the future benefits and costs are valued in the government's planning scheme—for example, if government also represents future, unborn citizens—the lower the social rate of discount will be.

In view of these five forces leading to considerable product, factor, and money price distortions, as well as considerations of external economies and diseconomies of production and consumption (by definition, factors not taken into account in private-investment decisions), it has been widely argued and generally agreed that a strong case can be made for concluding that a project's actual anticipated receipts and expenditures often do *not* provide an accurate measure of its social worth. It is primarily for this reason that the tools of social cost-benefit analysis for project appraisal are essential to an efficient process of project selection in developing countries.

Choosing Projects: Some Decision Criteria Having computed relevant shadow prices, projected a time stream of expected benefits and costs (including indirect or external effects), and selected an appropriate social discount rate, planners are in a position to choose from a set of alternative investment projects those thought to be most desirable. They therefore need to adopt a decision criterion to be followed. Normally, economists advocate using the net present value rule in choosing investment projects; that is, projects should be accepted or rejected according to whether their net present value is positive or negative. As noted, however, NPV calculations are very sensitive to the choice of a social discount rate. An alternative approach is to calculate the discount rate that gives the project an NPV of zero; compare this **internal rate of return** with either a predetermined social discount rate or, with less justification, an estimate of either the marginal product of capital in the economy or the market rate of interest; and choose projects whose internal rates exceed the predetermined or market rate. This approach is widely used in evaluating educational investments.

Internal rate of return The discount rate that causes a project to have a net present value of zero, used to rank projects in comparison with market rates of interest.

Because most developing countries face substantial capital constraints, the choice of investment projects will normally also involve a ranking of all projects that meet the NPV rule. Projects are ranked by descending net present value (more precisely, by their benefit-cost ratios, which are arrived at by dividing NPV by the constraint on total capital cost, K —that is, an NPV/K ratio is calculated for each project). The project or set of projects (some investments should be considered as a package of projects) with the highest NPV/K ratio is chosen first, then the next highest, and so on down the line until all available capital investment funds have been exhausted.¹⁶

Conclusions: Planning Models and Plan Consistency The process of formulating a comprehensive, detailed development plan is obviously a more complicated process than that described by our three-stage approach. It involves a constant dialogue and feedback mechanism between national leaders who set priorities and planners, statisticians, research workers, and departmental or ministry officials. Internal rivalries and conflicting objectives (not to mention political pressure from powerful vested-interest groups) are always to be reckoned with. Nevertheless, our presentation should at least serve to provide a feel for the mechanics of planning and to demonstrate the ways in which aggregate, input-output, and

project planning models have been used to attempt to formulate an internally consistent and comprehensive development plan.



11.4 Government Failure and Preferences for Markets over Planning

Problems of Plan Implementation and Plan Failure

The results of development planning have been generally disappointing.¹⁷ The widespread rejection of comprehensive development planning based on poor performance has had a number of practical outcomes, the most important of which is the adoption in a majority of developing countries of a more market-oriented economic system.

What went wrong? Why has the early euphoria about planning gradually been transformed into disillusionment and dejection? We can identify two inter-related sets of answers, one dealing with the gap between the theoretical economic benefits and the practical results of development planning and the other associated with more fundamental defects in the planning process, especially as it relates to administrative capacities, political will, and plan implementation.

Theory versus Practice The principal economic arguments for planning briefly outlined earlier in this chapter—market failure, divergences between private and social valuations, resource mobilization, investment coordination, and the like—have often turned out to be weakly supported by the actual planning experience. Commenting on this planning failure, Tony Killick has noted that

it is doubtful whether plans have generated more useful signals for the future than would otherwise have been forthcoming; governments have rarely, in practice, reconciled private and social valuations except in a piecemeal manner; because they have seldom become operational documents, plans have probably had only limited impact in mobilizing resources and in coordinating economic policies.¹⁸

To take the specific case of the market failure argument and the presumed role of governments in reconciling the divergence between private and social valuations of benefits and costs, the experience of government policy in many developing countries has been one of often *exacerbating* rather than reconciling these divergences—**government failure** rather than market failure. Government policy often tended to increase rather than reduce the divergences between private and social valuations. For example, public policies have raised the level of wages above labor's shadow price or scarcity value by various devices such as minimum-wage legislation, tying wages to educational attainment, and structuring rates of remuneration at higher levels on the basis of international salary scales. Similarly, investment depreciation and tax allowances, overvalued exchange rates, low effective rates of protection, quotas, and credit rationing at low interest rates all serve to drop the private cost of capital far below its scarcity or social cost. The net effect of these factor price distortions has been to encourage private and public enterprises to adopt more capital-intensive production methods than would exist if public policy attempted to correct the prices.

Government failure A situation in which government intervention in an economy worsens outcomes.