2 INFLUENCE EXERTED ON THE GENERAL ECONOMIC PROCESS

FROM UNPLANNED TO PLANNED POLICY

In this chapter an attempt will be made to gain an insight into the influence exerted by planning on the general economic process of a country. This should be understood as an attempt to estimate the "product" of the activity described in the preceding chapter. Before embarking upon this attempt we may summarize what we think are the essential differences between an unplanned and a planned policy. The characteristic features of a planned policy are, as we have observed already:

(1) Estimation of future developments as a basis for policy decisions instead of relying on the past evidence available at the moment of decision.

(2) The explicit formulation of more general aims of policy, in the ideal case for the economy as a whole, instead of incidental action.

(3) Coordinated action instead of random action by individual ministries or services.

The process from an unplanned to a planned policy in the sense just explained has been a very gradual one. Long ago, when the word planning had not yet been invented, the elements of planned policy just enumerated were not wholly absent. Thus, even if no formal forecasts were made, policy makers had some ideas on what the future course of events might be. In many cases they may have used, consciously or unconsciously, what we now call one of the "naïve" methods of forecasting—for instance, by simple extrapolation of recent movements or by assuming no movement at all. As is well known, cyclical downturns were not foreseen, leading to overproduction or, once they had occurred, to overpessimistic views on future development.

The formulation of aims of policy became more necessary after the belief in laissez faire was given up. Before that time there was no need for planning, since it was believed that free economic forces would lead to the best development conceivable. When this belief died it became necessary to formulate norms for optimum development. One of the current difficulties is that among many politicians, probably as a consequence of our education system, a preference exists for thinking in qualitative terms only. But an economic policy must be based on quantitative as well as qualitative formulations.

Coordinated action finally is somewhat at variance with the widespread acceptance, in Western countries at least, of the individual responsibility of ministers. Strictly speaking, each minister is free to determine his own policy. Cabinet policy, in the form of coordinated action, is not even a legal concept in many countries. In practice, most governments have a cabinet policy in dealing with larger issues and with emergency situations. The realization of its necessity de-

veloped in wartime and in the period of the Great Depression. For developing countries cabinet policy is more and more considered essential, as a consequence of the emergency of extreme poverty in which they find themselves.

The most important characteristic of coordinated action is its avoidance of inconsistencies. Inconsistencies may exist among the aims and they may exist between a set of aims and the set of instruments considered admissible. An elementary example of inconsistency in aims is one where a country would aim simultaneously at: (1) increased consumption, (2) increased investment, (3) decreased foreign assistance, and (4) decreased production, e.g. by a decrease in working hours. This set of aims violates one of the relationships of fundamental significance in economics, namely the overall balance equation saying that national product plus foreign assistance must equal consumption plus investment.

More complicated possibilities of inconsistency may occur when the number of instruments a government is willing to apply is smaller than the number of targets it wants to attain. In a somewhat general way we may illustrate this situation by assuming that a government wants to attain balance of payments equilibrium and full employment but is prepared to apply only one instrument, namely government deficit or surplus on current account. In most situations the level of government deficit necessary to attain full employment does not coincide with the level needed in order to equilibrate the balance of payments. The inconsistency does not now necessarily exist between the aims of the policy as such; if the government were willing to apply an additional instrument of policy, e.g. changes in the exchange rate or in the level of wages, the two targets might be attained simultaneously.

Inconsistencies in development policies will above all present themselves in the shape of neglect of the numerous

complementarities which are characteristic of an efficient process of development. A well-known example is the neglect of an import quota for spare parts, which must complement imports of capital goods of all sorts. Another typical example is the lack of repair facilities often leading to a large stock of relatively new capital goods remaining unused, for instance buses in local transportation. A third example is the lack of coordination between the process of building and the ordering of new capital goods, leading to the situation when for several months machines have to be stored without being used, or worse, remain in the open air exposed to weather influences. In one country where it was customary to build a hotel next to a new factory in a remote area, for possible visitors, a shortage of financial means prevented the factory from being built although the hotel was already completed. In another—otherwise extremely successful—country the road system is far behind the development of manufacturing industry. An important inconsistency in the execution of the plan of a big country resulted in a tremendous vicious circle bottleneck: a shortage in steel because of a shortage of coking coal, a shortage of the latter because of a shortage of freight cars, and a shortage of cars because of the shortage of steel. There are numerous other possibilities of inconsistencies in development policies, that is, any deviations from the relationships representing the most desirable development.

Inconsistencies can often be most easily discovered by the use of exact methods of analysis, i.e. by a mathematical approach. In practice this need not mean a very complicated approach, but it does imply an explicit rather than an intuitive treatment, and an expert treatment rather than a popular or "practical" approach. Well-trained economists were pointing out possible inconsistencies long before planning was practiced, and economic analysis remains the main in-

gredient needed for coordinated action. Mathematical formulation will help a good deal, however, in arriving at a succinct statement of the essential questions involved.

CONTENTS OF PLANS

In the last decade or so a considerable number of plans have been published; the U.S.S.R. has issued plans at more or less regular intervals ever since 1928. These, however, will not be considered in this study. The number of pages in published plans varies from a few tens to a few thousands. Notwithstanding an enormous difference in the volume and quality of these publications they have some common characteristics which will now be discussed briefly.

As a rule they contain, first of all, a survey of the aims and guiding principles of the development policy of the country considered. The larger part of most plan publications is devoted to a description in figures of the desired development, referring to the country as a whole and to the main sectors—agriculture, mining, manufacturing industry, energy, transportation and trade, building, the government sector, and some "social" sectors, such as education and health. The degree of detail given varies widely; in the most complete publications large numbers of individual projects are added. Such lists will be found, for instance, in the Turkish 1963–67 plan and the 1960–65 plan of the United Arab Republic (southern region). Some plans contain extensive figures on educational activities.

Most plans concentrate their estimates on production and investment figures, so much so that often a plan is considered synonymous with a program of investment projects. Some of the more precise plans also contain estimates on the volume of employment to be created and the development of the balance of payments and its components.

Influence on Economic Process

With regard to the implementation of the policy a number of plans mention some of the qualitative measures which the government proposes to take, ranking from fundamental reforms such as land reforms and nationalization schemes to detailed measures for the tax system or for social insurance or health. Thus India's First Five-Year Plan contains announcements about what the government proposed to do in order to obtain the "socialistic pattern of society" it was striving for. Turkey's First Five-Year Plan contains, among other things, announcements of a reorganization of the state economic enterprises and of the administration.

Because of its nature as an official document a plan publication usually states the results of the planning process but does not enter into discussions of the methods used or of possible alternatives. This means that especially the more elaborate plans are dull texts and the reader feels that the most important information is withheld from him. In order to provide the information the policy maker really needs for his decisions more must be said about the methods used, the possible margins of error in the figures used, the available means of policy, and alternative solutions. As a rule only scanty indications about these four subjects will be found in the published plans. As already observed, some plans do contain the mathematical model used, but this is seldom the complete method. Margins of error may be dealt with by indicating lower and higher limits to some of the most strategic data, such as the rate of growth of the population or the price level on the world market. Some of the most important means of policy, such as fundamental reforms, are usually mentioned, but their precise influence on the socioeconomic situation is, of course, a matter for conjecture only and other, simpler means are often not mentioned. Only very rarely will the wage level required to keep exports competitive be indicated; only seldom will a precise enumeration be given

of the extent to which the various means of an industrialization policy must be used in order to attain the goals set.

There are two main reasons why, for the time being, such relevant information is largely lacking in most published plans. First and foremost, our knowledge about the influence exerted by the various policy means and even our data on the economic development of a country are very limited still and subject to large margins of uncertainty. Secondly, most governments will rightly fear that a more explicit treatment of such questions may endanger acceptance by parliament and the public of any plan or policy. It will facilitate criticism without compensating for that drawback. All this means that only after a further successful development of our knowledge will it be possible to expect more explicit treatment of these problems in the plan publications; but if this development of knowledge is indeed successful public opinion will require that it be used. Even before that, however, there is scope for more precise treatment of a number of the questions mentioned in those plans which, according to present standards, fall short of the level of the better plans already available.

DRAWBACKS OF COORDINATED ACTION

Coordinated or planned action does show some less desirable features too. In a proper appraisal of a planned policy these must also be considered. They have been eloquently—although somewhat acidly—set out by an author like Professor Jewkes[1] and may be summarized under the following headings:

(1) Coordinated action is time-consuming. Indeed coordination, as well as government action, generally requires time, and the free activity of free producers can be quicker.

1. John Jewkes, *Ordeal by Planning* (London, 1948).

(2) Decisions to be taken by public authorities, in cases of regulation of markets, must be based on the incomplete information available: a number of technical and commercial details known to individual producers may not be available at the higher levels.

(3) Central decisions may imply bigger mistakes than decentralized decisions, since the latter are taken by a larger number of individuals whose decisions, when wrong, may partly neutralize each other.

When considering these features ascribed by Professor Jewkes to planning, one should be aware that he uses this word in two different meanings: on the one hand, in the meaning we have given to it and, on the other hand, in the meaning of a policy of detailed intervention with the production process.

In a general way the drawbacks just indicated will increase considerably the larger the number of instruments of economic policy, that is, the more detailed the interference with the production process. The phenomena just listed are among the reasons why there indeed seems to be an optimum degree of interference with production; beyond this level the advantages turn into disadvantages. On the other hand the drawbacks discussed seem to be of only secondary importance in many cases of a more global type of policy.

In the framework of our treatment of planning as one of the productive activities of an economy we may cover the same ground by introducing the concept of the *costs* of planning. These do not consist only of the costs in the usual sense of money flows corresponding with the salaries paid to planning officials and with the use of buildings, equipment, and raw materials (paper etc.), but also of the costs incurred by those agencies and production units whose assistance is asked; in addition, we may even think of a money equivalent to psychological strains created. The usual cost functions

will more or less apply, expressing an increase in total costs, the larger the number of acts of planning. The various activities may be subdivided into groups of activities and estimates made about the volume and the price of each of these in order to arrive at an assessment of total costs. As with any economic activity, planning should be carried on to the point where marginal revenue equals marginal cost. In a general way, the effect of the first "units" of planning activity will be larger than the effects of later units; there will be decreasing returns. It is also probable that the effects of the first few units are substantial, for the simple reason that the national economy produces such a high figure of net product that savings of the order of magnitude of one ten thousandth of it already far surpass the annual budget of any planning unit. With an increasing volume of planning the consecutive possibilities of further savings become less and less and it may well be that the contribution of the one-thousandth member of the staff can only be negligible.

THEORETICAL ANALYSIS OF THE INFLUENCE OF PLANNING

In principle, the influence exerted by planning must be estimated with the aid of a *comparative analysis:* we must compare a situation (or a development) in which planning has been applied with one in which it has not been applied, leaving all other data unchanged. We have to solve several problems before we can carry out such a comparative analysis.

To begin with, planning will always be part of a specific policy. Strictly speaking, therefore, we can apply our analysis only to the combined effect of that policy and its planning. Then, as we have already explained, even in an "unplanned" situation or development some unconscious forecasting will

have been done. We must know what has been done or we must at least make assumptions about it. In the unplanned situation there may not be, moreover, a complete absence of policy; on closer consideration we will often find that the main difference from a planned policy is that action is taken after some adverse development has occurred and in a trial-and-error way.

It will often be difficult to say, therefore, what precisely would have happened in the absence of planning. Sometimes we may make some general assumptions, however; we may say, for instance, that much of what happened before 1914 was typical of a nonplanned economy and we can take some of the characteristics of that period as representative for an unplanned development.

It will be clear that the gap between what is likely to happen with and what is likely to happen without planning will sometimes be small and sometimes large. This subject will be taken up in Chapter 3.

Precise theoretical analyses can be made more easily for simple, well-defined cases than for complicated situations. As a first example, let us consider a policy of *production restriction of a primary product*. Suppose we know, from econometric analysis, the supply and demand functions of the market of that product and the development of the exogenous variables of that market. In the simplest case the main exogenous variable will be income of the buyers of the product. With the exogenous variables given for a certain time period we can determine the prospective course of prices and turnover of the product. This we may call the unplanned development. We can now estimate a planned development by replacing the supply function by administrative decisions on the volume of production for each successive year. With the aid of the demand function and the same development of buyers' incomes as in the unplanned situation we can now

estimate the development over time of the prices and turnover under the planned situation. The influence exerted by planning on each of the endogenous variables of the market can now be estimated. Particular interest will be attached to the course of producers' incomes. We can even try to maximize these by varying the administrative decisions about the volume of production. Before identifying the corresponding development as the best conceivable we must pay attention to the consumers also.

This is only a first approach to the problem, however. To identify unplanned policy solely with the continuation of free enterprise is not always correct. A somewhat more sophisticated unplanned policy may be one where some production restriction is applied, although it is not based on any knowledge of supply or demand curves or the future course of incomes. On the other hand, even the planned policy cannot actually be based on a perfect knowledge of either future incomes of buyers or demand elasticities, but only on estimates and these may be wrong. Both of these conditions tend to reduce the difference between planned and unplanned policies and their effects.

Similar analyses can be made for markets of a more complicated character. Interesting examples of such markets are those of durable goods. With the mechanisms found by econometric analysis for, say, the markets for ships, houses, or automobiles[2] we may carry out similar comparisons between two developments: one where no interference with the market mechanism is assumed and one where a certain type of interference is assumed to exist.

For the broader aspects of planning it will be even more interesting to apply similar types of analysis to the economy

2. Cf. J. Tinbergen, *Econometrics* (New York, 1951), pp. 143 ff.; G. C. Chow, *The Demand for Automobiles in the United States* (Amsterdam, North-Holland Publishing Company, 1957).

as a whole; but here, by necessity, we must make simplifying assumptions of a more drastic character, or, in other words, we must use macroeconomic models, which as a rule will be less accurate. The simplest approach to our comparative study may be based on some very general assumptions taken from crude experience. Thus, in order to appraise a policy of anticyclical public finance we may simply assume that this results in reducing the variations in unemployment from what they were before 1914 to what they were after 1945. Or, in order to appraise a policy of planned development, we may simply assume that this results in reducing unused capacities from what they were before 1914 to what they were after 1945 and in stepping up the rate of investment from the pre-1914 to the post-1945 level. Alternatively, we may say that it results in reducing unused capacities from what they were in the United States before 1914 to what they were in the Soviet Union after 1926, with a similar assumption about the rate of investment. This can hardly be called a theoretical analysis and it is open to a number of criticisms. We must be able to prove that no other important differences in data influenced the patterns we are comparing.

A theoretically more satisfactory comparison uses the same macrodynamic model for the two developments to be compared. Again we may first assume that the course of the exogenous variables is known beforehand and we may then compare the outcome of two policies; for an appraisal of planning an anticyclical policy we may compare the results of a policy in which public finance is operated in the traditional way and one where it is operated in an anticyclical way. For an appraisal of a planned development policy, we may compare a policy of laissez faire and one of deliberate development. Again, we may have to introduce the possibility of wrong forecasts, which would reduce the effect of a

planned policy, and the possibility of wrong assumptions about some coefficients, having the same consequence.

In order to compare a policy of laissez faire with one of deliberate development we must, above all, have in the model an investment equation, that is, a relation explaining the changes in investment volume in terms of all the relevant phenomena which influence it. Among these phenomena are the level of profits after tax, the liquidity of enterprises, the rate of increase in demand, and the rate of interest, which could be summarized as the economic variables. But there are also factors at work such as the facilities available—energy, roads, technical assistance, level of education of workers, stability of government, intentions of government—which contain extra-economic components. Our knowledge about the impact of all these phenomena on investment activity is quite limited. Even the explanation of investment fluctuations in developed countries, where the extra-economic components do not change much and can therefore be neglected, has not so far been too successful.[3] This has induced even the planners using mathematical models either to use alternative equations or to use direct information on investment decisions rather than an equation. To explain investment in developing countries, where the extra-economic factors play a considerable role, is much more difficult. This means that it is virtually impossible, with the present state of our knowledge, to make a theoretically satisfactory comparison between what happens with and what happens without planning. Moreover it would not even be easy to indicate which of the explanatory phenomena will be different in the two situations, because of the gradual transition from a nonplanned into a planned situation which we witness—a fact already mentioned.

3. Cf. John R. Meyer and Edwin Kuh, *The Investment Decision* (Cambridge, Mass., 1957).

EMPIRICAL EVIDENCE

In order to obtain a clearer insight into the influence of planning in more complicated situations one may at least try to obtain detailed inside information about the process so as to ascertain the role played by planning. This is not equivalent to ascertaining its full influence since it is difficult, in the more complicated situations, to know what exactly would have happened in the absence of planning. Part of the role played by the planners would, in the absence of planning, have been played by others. The points made may be illustrated with the aid of three case studies concerning central planning by the Netherlands government after 1945.

The first case refers to the establishment of a *deflation program* in 1951 (and one in 1957 along similar lines), when the country's economy was characterized by a balance of payments deficit and threatened by a further deterioration of its foreign exchange balance because of an obligation to step up armament. The program consisted of a number of deflationary measures including: (1) reductions in civilian public expenditure; (2) increases in various taxes; (3) a wage increase of only one half of the increase in cost of living to be expected from (4) a reduction in subsidies on consumer goods.

The order of magnitude of the program for 1951 may be illustrated by the size of the reduction in total civilian expenditure—private and public—carried through: this was no less than seven per cent of national income.

The planned character of the policy implied, with regard to procedures followed, that it was prepared by the Central Planning Bureau in consultation with various ministerial representatives on the one hand and with the Social–Economic Council on the other hand. In this Council, one third

of the members are representatives of trade unions, one third represent employers' unions, and one third are experts appointed by but not responsible to the government. It was essential that the trade union and employers' union representatives participate in the discussion of the situation before the program took final shape.

With regard to content the planned character of the program appears from two main characteristics: namely, that the total amount of deflationary impulses advocated was geared not only to the direct effects but also to the indirect effects to be expected, and that contributions were asked from almost all groups of the population.

The role played by the planning agency was central because all the figures, and more particularly figures about the indirect effects to be expected, were calculated by it. The role played by the other persons and agencies mentioned was clear enough too, since it was essential to the desired procedure that they be involved. This is particularly true of the role played by the Social–Economic Council, which was required by the law.

The key to the success of the program has been considered to be the agreement of the trade unions with it, even though the wage policy mentioned under (3) was, on the face of it, not an easy thing for them to accept. Their acceptance was only possible because:

(a) There was an atmosphere of confidence between trade unions and government, the latter being composed of political parties in which the three main trade union organizations had considerable influence, namely, the Labor Party, the Catholic People's Party, and the Calvinist Party (ARP).

(b) The program tried to establish an equilibrium among the contributions asked from the various groups of the population.

An attempt to guess what might have happened in a less "planned" situation leads to the probable conclusion that a similar policy would have been carried out, with the following possible differences:

(a) Probably the extent of the program would have been insufficient because of the neglect of some indirect effects.

(b) The acceptance by the trade unions might not have been obtained, with the possibility of strikes and of higher wages than desirable and hence more unemployment.

(c) The policy might have been started at a later moment, based on past evidence of the balance of payments instead of on forecasts made half a year ahead.

It has been contended that the success of the program was partly due to the change in the world economic situation in the second half of 1951. This no doubt affected the 1951 figures, but it is probable that the favorable subsequent development of the country's economy is largely due to the 1951 policy program, which was formulated on the basis of pre-1951 data. As already observed, a similar policy was again proposed and carried out in 1957, although some felt that this second program was too small.

The second example to be discussed refers to a *"reflation" program* for 1953. Partly as a consequence of the previous program and partly because of the changed world economic situation (the post-Korean price fall), unemployment increased toward the end of 1952 and surpassed the "danger level," suggested by the Central Planning Bureau, of 3 per cent of the so-called dependent labor force (those working as employees of others, not as independent entrepreneurs). The Planning Bureau again prepared a program, this time to increase public investment, and it was again discussed in the Social–Economic Council. This time no una-

nimity was reached, since a group of members fearing excessive inflation of the volume of money voted against it. The government accepted the program, but it was not necessary to carry it out since the emergency situation created by the floods of early 1953 soon required additional investments surpassing the proposed volume.

Again the role of the planners in the preparation of this program was clear enough. An attempt in this case to guess what would have happened in an "unplanned" state leads us to believe that the program would not have come into existence, for the following reasons:

(a) Most politicians at that time had not yet accepted wholeheartedly the obligation of the government to take action when the 3 per cent unemployment level had been reached.

(b) The tendency prevailed to follow a trial-and-error policy, meaning that the government would have waited until higher unemployment developed and then tentatively would have increased its expenditures, probably to an insufficient degree.

The third case to be discussed refers to the policy of *stimulating productivity*. Around 1950 many European countries had been convinced by their American advisers that European productivity was low and might be consciously stimulated by "productivity centers" in a large number of industries advising both employers and employees about methods to increase labor productivity. At that time the task was considered sufficiently important to charge a new minister with it and this minister, Professor A. H. M. Albregts, asked the Central Planning Bureau to estimate the macroeconomic consequences to be expected from a plan for spurring productivity. The analyses made by the bureau revealed what was certainly a surprise to all concerned: that an increase in productivity by a single small country might well, over a

short term—during a period of one or a few years—create difficulties along with some advantages. These difficulties could be either increased unemployment or an increased deficit on the balance of payments or both.

Some of the reasons are that in the short run the increase in productivity will not raise the demand for exports sufficiently to pay for the increased imports of raw materials, and it will reduce the number of workers needed. In the longer run the increase in demand for exports may solve both problems. The problems would be less serious if other countries also increased their productivity, leading to cheaper imports into and higher demand for exports from the country considered. The analyses also showed that what could be successfully undertaken in the short run was a *selective* increase in productivity, directed at three types of industries: (1) those with a shortage of manpower; (2) those whose demand elasticity is high; and (3) those whose import needs are low.

The program accepted and defended by the minister was based on these ideas. In this case the role of the planners is rather clear; had they not been asked for advice, the idea of a selective productivity policy would not have been advanced.[4]

Numerous examples of the influence exerted by planners on the decisions of private enterprises are supplied by the French experience, where contacts in the mixed industry committees have been very fruitful. The planning of manpower and training needs in many industries had its origin in such contacts. Previously, employers had not been accustomed to look ahead over a sufficient number of years to understand the necessity of educating more skilled workers.

The impact of planning on the economic progress of de-

4. For a formal treatment of the problem cf. J. Tinbergen, *Economic Policy: Principles and Design* (Amsterdam, North-Holland Publishing Company, 1956), section 4.251.

veloping countries can be estimated in a very broad and crude way by comparing their development before and after the Second World War since no planned development took place before that war. For many Asian and African countries this means at the same time a comparison between the colonial regime and the new independent government.

Before World War II development of the countries concerned was slow and subject to the cyclical movements emanating from the unplanned development of the industrial countries. For large areas of Asia and Africa the rate of increase in national product did not surpass that of population, keeping the income per head at a constant level. Investments were in the neighborhood of 5 per cent of national income and were mostly directed at the expansion of primary production, that is, agriculture and mining. The inflow of foreign capital in a country such as India has been estimated to have been some one per cent of national income on the average. At present the level of investment in most developing countries is higher: some 9 per cent in Asia, some 8 per cent in Africa, and some 11 per cent in Latin America. Investments are more diversified; manufacturing industries are now an important object. In the first decade after the war the pattern of investment was not yet based on very systematic analyses of the development potential of the countries and was often influenced by personal preferences of rulers, who displayed in several cases a taste for monumental investments. In some countries the road system was given undue weight; big irrigation dams were favorite projects, as well as large buildings.

Gradually the choice of investment projects became more sophisticated. The International Bank for Reconstruction and Development introduced a practice of careful scrutiny, first of single projects, later of integrated development programs. Other United Nations agencies in various fields fol-

lowed and gradually more equilibrated investment programs were established. Investment in small-scale enterprises, technical assistance and training, and an increased emphasis on the creation of employment all helped to attain this more balanced type of action. While the vast majority of programs are still based on national analyses, a beginning of international coordination is now emerging. Over the period 1950/51 to 1958/59 gross domestic product rose by 3 per cent per annum in India and Pakistan, by 4 per cent in Indonesia, and by 6 per cent in Brazil. These figures may well be representative for the continents these countries represent.[5]

The role played by planning, to give a more concrete illustration of its impact on development, may be summarized by stating that in most developing countries nowadays the planning agency is directly involved in supplying to the government figures on the desirable rate of development and on the projects to be included in the government program. A huge number of projects have been analyzed in such countries as India, Pakistan, the United Arab Republic, and Turkey, to mention only a few, both for such programs and for financing by international institutions.

DEVIATIONS FROM PLANS IN ACTUAL DEVELOPMENT

While considerable influence has been and is being increasingly exerted by planning on actual economic and social development this does not imply that real development coincides with the plans. Important deviations occur and more often on the negative than on the positive side: actual development is less favorable than hoped for.

5. Cf. *World Economic Survey, 1961* (New York, United Nations, 1962), table 1–5, p. 21.

The outstanding example in the field of development planning is the disparity between actual development in India during 1956–60 and the Second Five-Year Plan; roughly speaking only 75 per cent of the growth hoped for was attained. To a considerable extent this was due to a lagging development in agriculture, which itself was partly attributable to unfavorable weather conditions. Another reason for the deviation from plan was the disappointing flow of foreign aid. Still another portion of blame must be imputed to the complex of difficulties characteristic of most developing countries: a complex of human attitudes which it is not so easy to change quickly. Insufficient training, knowledge, discipline, and integrity (in the sense of behaving according to the rules of a modern society) are at the center of present problems. There is also a lack of willingness on the side of the developed countries to make the efforts in the public as well as the private sector that are needed to complement the developing countries' own efforts. Often this lack of willingness is rationalized by referring to the political risks of unexpected changes in economic policy or of nationalization.

Disparities between planned and actual development can be observed continually also in short-term planning. As already observed (cf. Chapter 1, pages 9–13), a normal element of any such planning process is to compare the current situation with the aims of policy. The gap found between these two sets of figures is identical with the difference between the actual situation and the planned situation as long as no change in aims occurs, because the planned situation and the set of aims are identical. In most annual plans an analysis is made of the deviations, followed by an attempt to classify their causes. Ideally these causes can be of one of the following three types:

(1) There may be a deviation in the policy actually fol-

lowed by the government machine from the recommended policy.

(2) There may be a gap between the policy recommended and the "correct" policy as a consequence of a "wrong" forecast of some of the changes in data.

(3) There may be such a deviation because of the use of a "wrong" model.

In recent years several studies have been made of the role played by these various causes. Evidently causes of type (1) cannot be considered failures of the planning methods used, but causes of types (2) and (3) do represent such failures. In view of our imperfect knowledge of the operation of economies their occurrence is to be expected. Each model is in a way "wrong." An early survey of the results obtained by the planning agencies in the Scandinavian countries, the United Kingdom, and the Netherlands[6] showed the degree of success obtained by forecasts of twelve variables. The forecasting coefficient Ψ was calculated as the ratio between (a) the standard deviation of the differences between real and predicted values and (b) the standard deviation of the annual changes in the variable considered.

From the table on page 64 we see that the balance on invisible items in the balance of payments is a very difficult figure to forecast; partly this is due to its being a difference, and partly to the lack of good statistics, but it is also due to the sensitivity of these items to keen international competition. The very favorable figure for Dutch exports may be attributable in part to the particular care given to this item in Dutch planning, such as the decomposition of exports into a large number of items.

6. H. Theil, "Who Forecasts Best," *International Economic Papers*, No. 5 (London and New York, 1955), p. 194.

The following table summarizes some of the results (for the variables predicted by all countries compared):

Forecasting Coefficients Ψ^a

	NL	*GB*	*N*	*S*	*DK*	*Average*
Export value	.16	.26	.76	.62	.53	.40
Import value	.26	.25	.73	.48	.51	.41
Balance invisible items	.29	.91	.97	1.30	.57	.72
Balance of payments surplus or deficit	.48	.52	.76	.71	.73	.63
National product	.53	.63	.66	.78	.56	.63
Industrial production	.54	.51	.59	.52	.81	.59

a. For definition, see text. Countries are indicated by the following symbols:

NL Netherlands
GB United Kingdom
N Norway
S Sweden
DK Denmark