

PROBLEMS OF CENTRAL ECONOMIC PLANNING IN THE NETHERLANDS¹⁾

By J. TINBERGEN

BEFORE the second world war the level of economic welfare in the Netherlands was ranking fairly high, viz. somewhere between the British and the French level. During the second world war the economic position of the Netherlands seriously deteriorated. Until September, 1944, consumption only decreased gradually, but in response to the railway strike, meant to support the allied military operations, the Germans cut off any further coal and food supply to the western part of the Netherlands and this resulted in a rapid decrease of consumption. As a matter of fact it could be said that a complete decomposition of economic life took place. The caloric value of rations, still about 1500 per day in September, 1944, fell as low as 800 calories per day in May, 1945. Gas supply was stopped; trams did no longer run; electricity production was discontinued and no coal for heating was available. The population of the large towns had to go out to the country in order to collect some food, often using bicycles without tires or even walking several days. Preparation of meals took place on very small stoves with the help of small pieces of wood, obtained from trees, cut down in the avenues and parks, or by demolition of empty houses or of furniture. Most industries were closed down, except bakeries, food shops and some offices. As a supplement to the official rations tulip bulbs and sugar beets had to be eaten. The few which could afford to pay black market prices — if they wanted — had to pay one hundred times the normal prices. Towards the end of the period many thousands of people suffered from hunger oedemia. The liberation early May brought a sudden change in these dramatic conditions.

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Nevertheless the physical condition of the population had suffered badly; in addition also labour morale had fallen enormously. Labour productivity was on a very low level, somewhere in the neighbourhood of 25 % of

¹⁾ Lecture to *Nationalekonomisk Forening* 18. April 1947.

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normal. This was partly due to other factors as well: the young workers had not been trained and sabotage of production was considered a national virtue during the occupation; and this attitude could not at once be changed. In addition, productive equipment was in a very bad condition. Apart from demolition by bombing, the quality was reduced by neglected maintenance, by the depletion of all sorts of stocks and by straightforward robbing by the Germans of the equipment of many plants and particularly of railway equipment during the last seven months. Total capital losses of these various types have been estimated to amount to about 8 billions of guilders (pre-war price level) or about 30 % of the national wealth as far as invested at home. These capital losses again had a tendency to reduce labour productivity, whereas on the other hand they led to a tremendous deferred demand.

For these two major and a number of minor reasons, there was an enormous gap between productive capacity and consumption desired. This gap was accentuated by the disequilibrium in the financial sphere: continued money creation during the occupation in order to pay for the occupation costs and forced exports to Germany had provided the population with ample cash balances, giving them a sense of wealth and the possibility to exert a huge demand. The same sort of wealthy-feeling resulted from the increased holdings of state bonds, also issued for the financing of occupation costs. There was therefore the tremendous danger of a big inflation starting.

In principle the solution of the economic problem of the Netherlands should be: increased production, both of consumers' goods and of investment goods; consumption at a moderate level and stringent price control, backed by a monetary reform aiming at a radical diminution of money circulation.

Even when using all its energy in order to accomplish this program, Holland would not have been able to do without credits, but in view of amortization and interest burdens to be expected for the future, foreign borrowing should be kept as low as possible. The execution of this program would require for the first years to come a rather extensive and detailed intervention by government agencies, such as rationing of consumers goods, allocation of imports, the monetary reform and price and wage control. Even then it would not be possible, of course, to prevent some people from taking up various sorts of activity detrimental to general welfare, such as black trading, foreign exchange smuggling etc., but these activities should be reduced to a minimum with all possible means.

The great importance of government measures for the execution of this program necessitated the avoidance of contradictions and doubling up between the various government agencies, i. e. the co-ordination of economic, social and financial policy. To this end, a new government agency was created, viz. the Central Planning Bureau, provisionally in September, 1945, and definitely established in April, 1947.

The task of this bureau is to advise the government on this co-ordination; one method to be used being the establishment of a central economic plan. A central economic plan is defined as a set of estimates and directives, concerning the future development of national income, consumption, investments, imports, exports etc. From such a plan or rather from alternative plans prepared at the same time, the government may make a choice as to their economic policy.

The advantage of bringing the figures together in the form of one consistent "plan" is that it forces the constructors of the "plan" to take into consideration all parts of the national economy, all aspects of any given economic policy and, as far as possible, all important consequences of that policy. The construction of such a plan does not necessarily mean that the government are willing to prescribe to private enterprises every detail of their activity. The present conditions make it necessary indeed to regulate many details, but it is almost generally hoped in the Netherlands that many of these detailed measures may be abolished after a few years. It is by the present shortage of foreign exchange, raw materials and equipment, that the rather stringent policy now followed is dictated. But it is assumed that in the future more freedom can be given to private enterprise.

It is the intention of this article to give an impression of the work so far done by the Central Planning Bureau. The following reports have been published:

- (1) the Central Economic Plan for 1946 (May 1946);
- (2) the Central Economic Plan for 1947 (September 1946);
- (3) a study on the demand for consumers' goods for 1947 (April 1947).

The two plans that have been published are both what the Bureau calls "over-all plans", giving only estimates and directives about the broad subdivisions of national income and expenditure, such as total consumption, total investments (subdivided into buildings, machinery and stocks), total imports and exports, etc. In addition to these over-all plans detailed plans for 1946 and 1947 have been established but so far not published. The annual plans are linked up by what is called a "frame plan", giving the broad features of the development for several years; in principle for the whole reconstruction period, which was provisionally adopted to be the period 1946—1952.

By first drawing up an over-all plan and, as a second stage, a detailed plan, the Bureau made a deliberate choice. It would have been conceivable that the two steps would from the start have been united, as was e. g. the case in the Norwegian National Budget. The Dutch method of first making an over-all estimate intended to avoid the difficulty that the partial plans obtained from the separate ministries might, in the first approximation, add up to totals of consumption far beyond the practical possibilities. By first

making general estimates as to the level of production and consumption that may be realised, the bureau is able to give some directives to the separate ministries before they start making their partial plans.

The chief aim of an over-all plan is to make a comparison of resources available and the destination of those resources. Or, in other words, to make an estimate of the volume of production and other resources available (e. g. foreign credits) and to find what level of consumption and investments is compatible with these resources. The meaning of the estimates should not be, in the Bureau's opinion, that of a forecast in the narrower sense of an extrapolation of existing tendencies, it should contain an element of task-setting. If a first estimate would show e. g. levels of consumption and investment which are too low from the psychological or physical point of view, the estimate of production may be revised such as to lead to a picture which as a whole is more acceptable. It goes without saying that the task-setting element must always remain realistic, however.

Once the over-all plan has been calculated, its figures are taken as a starting-point to the partial plans, a first draft of which is obtained from other government and private agencies, based as much as possible on the general information supplied by the over-all plan. The next task of the Central Planning Bureau is to unite these partial plans in a consistent way, which usually will mean that slight changes have to be made in the partial plans. The plans do not only contain information about the volume of production and consumption, i. e. physical quantities, but also on the price and cost levels which are considered most desirable.

It is in the nature of any plan (i. e. an estimate for future development), that it has to be revised periodically for changes in the data. This is true for individual plans for entrepreneurs as well as for central plans. In the case of the Netherlands as a whole, some of the most important changes in data that had to be inserted into the original estimates were:

- (I) the increase in world price level, occurring after the rather bad world crops in 1946;
- (II) the unsatisfactory development in the relations between Indonesia and the Netherlands;
- (III) the consequences of the dry summer of 1947.

Apart from these changes, other revisions had to be made as a consequence of refinements in the calculations of some items of consumption, which were underestimated before.

In addition, a clear distinction should be made between plan figures as introduced in the above sense and authorisation budgets such as e. g. the official state budget. It is in the nature of such an authorisation budget that it should contain safety margins tending to increase the figures beyond the most probable figure. A plan or national budget, however, should try to give

the most probable figure, task-setting elements included, but safety margins excluded.

One of the objectives of central planning, as distinct from individual and decentralised planning, is to reduce as much as possible the differences between what the Swedish economists would call *ex-ante* and *ex-post* values. One of the reasons for differences between intended or expected (*ex-ante*) and realised (*ex-post*) values for many economic variables is the circumstance that the various subjects in the community do not know of each other's intentions and therefore sometimes counteract each other. This may be avoided to some extent by several forms of central planning, even if this central planning is not compulsory.

In principle the plans should show an allocation of resources over various uses in such a way as to equalise marginal utility in the various directions. It goes without saying that it is often necessary, in practice, to make decisions for which this equalisation is not guaranteed, but only approximately realised.

In considering the methods followed by planners it should not be forgotten, however, that the maxim of equalising marginal utility is in fact somewhat less determinate than it would seem at first sight. Economic theory already tells us that marginal utility depends on (I) what distribution of incomes as assumed to be justified and (II) what choice between future and present welfare should be made.

Reality adds many more difficulties, particularly under the present conditions. Prices are regulated, not free; and therefore are no longer a true measure of the value of a good or a service. In principle one should use "accounting prices", different from actual prices. For many services, it will not be possible even in a "free society" to obtain a correct measure of their utility. This is particularly true for many government services, as was generally recognized by all economists dealing with national income problems.

A further major difficulty in the present situation is that official exchange rates do not reflect the actual scarcity of the various currencies: hard currencies being underestimated and soft currencies overestimated. It is therefore hardly avoidable that a number of decisions as to the allocation of resources is taken rather arbitrarily. The best policy to be followed here is to make the decisions as systematic as possible and to submit them to the judgement of as competent people as possible.

The Netherlands Central Planning Bureau so far worked along the following lines.

(a) Requirements by public authorities were taken as given. It is the intention to establish criteria in order to test these requirements as soon as possible, but this could not in fact be done during the first few years.

(b) Investment requirements as a total were based on the necessity to provide the working population with the minimum equipment necessary to guarantee high employment.

The estimates were based on estimates of the development of the working population and of the average capital per worker required. This figure was initially taken to be 10.000 guilders per head and has since been slightly revised on the basis of price increases and a large sample of new investment projects investigated by the responsible government agencies. The order of priority for individual investment projects as far as subject to government control, was based upon estimates concerning the yields in hard currency to be expected.

(c) Consumption requirements were based partly on food norms expressed in calories, amounting to 2300 calories per adult (with additions for heavy and very heavy labour). As to non-food items, an attempt was made to obtain harmony between these items and food items on the basis of family-budget statistics. From these family-budgets (relating to pre-war years) the free choice of consumers could be studied. The pre-war budget statistics, however, had to be revised for several reasons:

- (I) it was known that some secular developments in consumption known from the past had continued;
- (II) some mistakes in budget statistics due to biased sampling were corrected;
- (III) estimates were made as to the accumulated demand for durable goods, due to the impossibility of replacement during the occupation;
- (IV) a correction was made for the demand by war-hit families.

The consideration of various levels of income made it possible to create a method of adapting consumption plans to various conceivable welfare levels. The confrontation of resources and requirements showed which welfare level could be realised.

For the detailed plans figures for the several branches of industry were obtained: from the government agencies dealing with raw material allocations, as far as manufactory industry is concerned, from the Ministry of Reconstruction for building industry, from the Ministry of Agriculture for agriculture etc.

These estimates were based on:

- (I) estimates for home consumption, partially based on the family budget studies mentioned and partially based on the expert opinion of the various agencies mentioned;
- (II) estimates on export possibilities made by the same agencies and
- (III) estimates on production facilities which depend in some cases on equipment available, in other cases on manpower available and in still other cases on raw materials available in the world market.

After the elimination of obvious contradictions between these partial plans they could be combined into a complete detailed picture for the national economy. One of the most important instruments in detecting inconsistencies was supplied by the type of tables introduced by Prof. Leontieff. These tables give a picture of all transactions between a complete set of industries, including consumers, government, foreign countries and some other groups as separate "transactors". The filling out of these tables finally results in a detailed system of social accounts which in a sense is the "finished product" of detailed planning activities. Similarly a less complicated system of social accounts using only seven groups of households was inserted in the over-all plans.

The activities of a new co-ordinating agency like the Central Planning Bureau only gradually contribute to a better running of government machinery. In the beginning the new agency has to establish all sorts of contacts and to find out its methods without disturbing the course of events. Only after results of some importance have been found will it be possible for the new bureau to contribute materially. Such contributions have now been made at various opportunities, chiefly by supplying information on the connections between economic variables whose mutual dependence was not hitherto studied. The connection between imports of raw materials and the level of production is one example in point. It is important to know this connection if the consequences of foreign exchange restrictions for the volume of employment have to be studied. The connection between national income and various forms of saving is another example. It is necessary to know this relation if the financing of investments shall be safeguarded. In many cases the work of the Central Planning Bureau stimulated the improvement of other administrations since it appeared that a certain type of information was not available but could be made available by a certain agency. The Ministry of Finance now supplies data on the nature of government expenditures which did not exist before; systematic programs have also resulted from requirements made by the Central Planning Bureau.

In the future the task of the Central Planning Bureau may well be another one than at present. No government decisions on this point have been taken yet. The general tendency in the Netherlands, however, is to abolish as soon as possible some of the detailed regulations which are now unavoidable. In such a freer economy a stabilisation of employment will be one of the chief points of government policy. For such a policy important contributions could be made by the Central Planning Bureau. Preparatory investigations have already been started, e. g. on the public works which could be executed during a depression period. Apart from employment policy in this sense, a program of general development can hardly be established without studies as made by the Central Planning Bureau. The Netherlands with their

rapidly increasing population will have to industrialise intensively. Various programs connected with this process, such as the training of workers, the building of equipment and plants, can only be systematically made with the help of the type of statistical studies made by the Central Planning Bureau. An important part of this work will consist of an analysis of world-market tendencies. These examples are sufficient to show the extensive task for "planning in a free society".

Finally a few words may be added concerning the actual development during the past few years of the economic position of the Netherlands. As was already stated at the beginning of this article, production was at a very low level immediately after the liberation. The development up to the middle of 1947 is well illustrated by the index of industrial production (1938 = 100), calculated per working day:

1945	4th quarter.....	57
1946	1st —	62
—	2nd —	68
—	3rd —	76
—	4th —	88
1947	1st —	85
1947	2nd —	92

Correspondingly, exports have increased considerably. In January and February 1946, only 20 millions of guilders of exports were recorded, whereas the monthly level is now in the neighbourhood of 160 millions guilders. Although this is a rapid increase, the level is still only one-half of the pre-war export volume and it is clear that the export problem has not yet been solved. The necessary process of readjustment will have to last more than two years. For future developments it is of the greatest importance that the price and cost level be kept low. So far the government have succeeded in stabilising wage rates at about 185% of 1938 which in view of the depreciation of the Dutch guilder immediately after the liberation seems to be the correct level for a successful international competition.

It is interesting to add a few words about a comparison between the Belgian and the Dutch development. It is often pretended that the Belgian government, by following an economic policy of more freedom to private enterprise, did a better choice than the Dutch government. I am not sure this can already be proved now. Economic policy is to a large extent determined by economic circumstances. Perhaps the clearest example of this thesis is the interesting fact that in Denmark almost the same financial policy was followed by a more or less conservative government as was followed in the Netherlands by a progressive government. The circumstances

in the Netherlands were so different from those in Belgium that the Dutch government had no other choice for their economic policy. Belgium had no difficulties with its overseas territories; Belgium had an important dollar balance at the moment of the liberation and its industrial equipment was far less damaged than the Dutch. This permitted the Belgian government, which is of about the same political structure as the Dutch, to follow a freer economic policy. Nevertheless the rate of increase in production as indicated by the general index of industrial production is not very different in the two countries. And the level of money wages in Belgium is now at about 320% of pre-war. The consequences for the future Belgian development cannot yet be seen clearly. It will be certainly interesting to make a comparison of the results of these two types of economic policy. At this moment, however, no conclusions seem possible yet.