IV — Methods of Short-Term Forecasting at the National Institute of Economic and Social Research, London

by

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Since the beginning of 1959, the NIESR has published in its "Economic Review" quarterly analyses and forecasts of the state of the British economy, looking ahead approximately one year. The NIESR is a private non-commercial organisation of academic standing. But because of interchange of staff with Government departments and especially with the Treasury, and through many informal contacts, we use methods which are broadly the same as those used by the economists within the Treasury (their forecasts are not systematically published). We have frequently published conclusions recommending the Government to adopt particular policies. But, as might be expected, those conclusions have not always coincided with those drawn by the Government — even when the statistical analysis and forecast were virtually identical.

We would not claim any special system or method. I would not deny that our approach is deeply influenced by the Anglo-Saxon tradition of empiricism. But we do our best to improve on pure empiricism by systematic statistical analysis of the past — in fact, by a slightly sceptical but always hopeful use of econometrics.

In our published presentation, however, we keep in mind the interests of the 4,000 business men, civil servants, journalists, and politicians who subscribe to our Economic Review, and some of whom, we hope, read it — either directly or through summaries in the press. We do our best to present our analysis in language which would be understood by anyone accustomed to read Government statements on economic policy or the offerings of economic and financial journalists. This means that the equations, on which some of our conclusions are based, are generally condensed in a footnote, or an appendix, or do not appear in print at all.
One thing should be added. Our object is not only to provide a forecast, or to tell Governments, from the height of our ivory tower, how to solve the economic problem. It is at least equally important to analyse and interpret what is happening now — to attempt to explain the chain of cause and effect which has produced the present situation. If we cannot successfully achieve this more modest aim, then we certainly cannot forecast with confidence, or advise usefully on policy. And we have, no doubt, many readers with no confidence at all in our forecasts or our policy prescriptions — but who will at least be willing to learn something from a rational explanation of the present situation.

Data

The first stage in any forecast — and not the least difficult — is to determine where we are now — to find a reasonably firm platform from which to launch our rocket into the future.

We are fortunate enough now to possess in Britain a very large body of official and private statistics which are reasonably up to date and very comprehensive in their coverage. But wealth has its own problems. The statistics do not always tell an unambiguous story, and some are definitely contradictory.

Our analysis is founded statistically on the system of national accounts. We are now able to calculate the GNP each quarter from three independent approaches — output, expenditure and income. It is only to be expected that the three approaches yield, sometimes, significantly different answers to the question: by how much did the GNP change in the last two or three quarters? For instance, between 1961 and 1962 the GNP at constant prices estimated from expenditure statistics declined by 0.2 per cent; estimated from income, it increased by 0.5 per cent; estimated from output statistics, it increased by 1.5 per cent. (This was perhaps an extreme case.) Moreover, as time goes on, the preliminary estimates of these important magnitudes tend to be revised quite substantially.

Such variations in the estimates of complex magnitudes are certainly not evidence of inefficiency in the official statistical services. They arise because of many differences and inconsistencies, at present unavoidable, in the timing of records of transactions, in the choice of price indices, or in the completeness of the statistical records. They teach us a useful lesson: that history — even history in figures — is a subjective matter.

Our first task, therefore, is to establish what seems the most probable and internally consistent account of economic developments during the past few months (1). Sometimes this means that a particular series of statistics is not only regarded with sus-

picion but explicitly assumed to be incorrect. (For example, the latest official estimates of changes in stocks showed a seasonally adjusted decline of £30 million in the third quarter of last year — immediately followed by a rise of £147 million in the fourth quarter. Examination of the trend of imports, of output, and of expenditure, provides nothing to explain so large and sudden a change. So we felt justified in assuming that this violent change in stockbuilding did not in fact occur, and that the movement was in reality more gradual). However, we can never be completely confident that our own judgement is to be preferred to the statistical record and we try to retain a margin of uncertainty in any conclusions about the future drawn from an uncertain record of the past. This is one reason why we do not rely upon a purely mechanical « model » as a means of forecasting. We feel it absolutely necessary, each time we come to forecast, to soak ourselves laboriously in the detailed records of the recent past. The machine must accept or reject a statistic. A man can hold in his mind a provisional and flexible judgement about the weight to be attached to a doubtful statistic.

The uncertainty about the immediate past prevents — I hope — excessive confidence or absurd precision in the forecasts. One cannot usefully set the instrumentation of a rocket to hit the moon — demanding a precision expressed in tiny fractions of a millimetre — from a launching pad whose location may lie anywhere between Bruxelles and Louvain.

I should make one more point about the data. Our basic time unit is generally the quarter — sometimes the month. We therefore deal almost exclusively in seasonally adjusted statistics. We would not regard forecasting or conjunctural analysis for longer periods than a quarter (or perhaps 6 months) as useful. So much can happen within a year that a forecast of an annual average has little practical value.

Our basic data are the normal official statistics. We also make considerable use of figures collected by the Konjunkturtest method. We do not conduct a Konjunkturtest ourselves; this has been done most efficiently by the Federation of British Industries for several years. We have, however, conducted a fairly elaborate comparison of the results of the Konjunkturtest with the story told by the normal statistics, particularly to see how far we can rely upon the forecasts of production, exports, etc., made by business men (2). The results are encouraging. The relation between what a majority of business men say has happened, or expect to happen in future, is

(2) s 'The F.B.I. Industrial Trends Inquiry s, N. I. Economic Review, November 1963. For example, we found that the statements about the trend of output in the previous few months were useful as confirmation of the other rather uncertain and out of date indications shown by the official production index and sometimes signalled a turning point in output before the official index. But the forecasts of businessmen about output did not add much; they seemed to do little more than reflect the trend of the immediate past. The Konjunkturtest results for stocks, prices, and profits were of very little value. But the results for forecast capital expenditure were very valuable.
not a simple one; but a systematic relationship can be established in respect of most of the variables.

**Forecasting**

Our forecasting « system » is a perfectly familiar and simple one. The general framework is to forecast changes in the various items of real national expenditure and to subtract changes in imports. This yields a forecast change in real national output. This forecast of output may often need to be tested against the limits on output set by the supply of factors of production (labour and capital), but the really important tests are:

a) What effect will the predicted increase in output have on the level of unemployment? Will the pressure of demand for labour set up heavy pressure in the labour market which will lead to wage increases and ultimately to price increases?

b) Will the balance of imports and exports lead to pressures on the balance of international payments, on the international monetary position of Britain and on the gold and foreign exchange reserves?

In the light of the answers to these questions — which require study of the implications of the forecasts of expenditure and output on the trend of wages, prices and employment — we can reasonably consider whether a change in Government policy is probable and/or desirable.

I would not suggest that this is the only, or even the best way, of looking at the conjunctural situation. But it is a way which appears to fit in well with the preset preoccupations of those concerned with the day to day management of the British economy.

In forecasting expenditure, we cannot, of course, look at each separate item — investment, consumption, etc. — independently of the rest. Everything depends on everything else. But we are not approaching the problem each quarter with a blank mind or in complete ignorance. We know roughly what the situation is and how it is moving. Hence we can break into the circuit of economic flows at one point with at least a rough idea of what is happening elsewhere. We proceed by iteration, by trial and error, making assumptions about one variable with a not unreasonable idea about the general tendency for the other variables.

We normally work in quarters, and look first at the probable situation in a quarter about one year ahead. We then try to fill on forecast figures for each of the quarters between the current period and the forecast period. We also try to form a general appreciation of the probable evolution of events after a year ahead.
To provide a causal framework for an analysis, we find it useful to treat as quasi-independent variables the movement of fixed investment, government expenditure and exports — the major items of expenditure other than consumption or stocks. We can regard changes in consumption, in the short-term, as dependent on changes in these non-consumption expenditures, and changes in stocks as dependent on changes in the resulting total output. We break into the circle in this way not because of any special theoretical view of the dynamics of the Konjunktur, but rather because we find it convenient and helpful.

Fixed Investment

We have two classes of data bearing on future investment. First, there are statistics of orders received by the manufacturers of machinery and by the construction industry; for building work these data go as far back in the production chain as statistics of applications made to government agencies, and approved by them, for the construction of new factories, and the requests to architects to prepare plans. We have information, too, about the future programmes of the public sector. These statistics furnish a very good forward indication of the general direction of investment expenditure many months later. We are experimenting with attempts to determine more closely the quantitative relationships and the exact time lags between these forward indications and actual output of investment goods. Naturally, the time lag varies from time to time, partly according to the relation between the flow of orders and the productive capacity of the relevant industries (3). So far, we have not been able to establish more than approximate relationships.

Secondly, we have forecasts from firms of capital expenditure for a year or so ahead. Statistics of expected future capital expenditure are collected for a large sample of firms by the Board of Trade. More general data about future capital expenditure are given by the F.B.I. Konjunkturtest. Experience shows, however, that these forecasts by industrial managements — and the corresponding programmes of the public sector — are capable of very substantial revision. They cannot be accepted «au pied de la lettre». For instance, in the summer of 1959, manufacturers predicted to the Board of Trade a fall in capital expenditure in the year 1960 of 5 per cent; in fact general economic conditions changed and their investment increased by 18 per cent.

Hence, we must be prepared to reject the forecasts made by industrial managements if economic conditions have changed since they were made. We must take a view, based on previous experience, of what trend in investment is consistent with the general

trend of demand as a whole; our basic hypothesis is that the major determinant of investment is the expectations of entrepreneurs about the future trend of total demand. The forecasts of entrepreneurs are evidence of their expectations at a particular point of time — but these expectations can change quite quickly. Thus we make maximum use of the statistical indicators, but modify them, if necessary, in the light of our general view of the trend of demand and output as a whole.

Government Expenditure

It is, I believe, a common experience that government agencies are slower to produce statistics of their own transactions, in a meaningful form, than much of the private sector, and that their forecasts of the future trend of their own transactions are less satisfactory. Britain is no exception. The records of public expenditure in Britain — with our overpowering inheritance of traditional ways of safeguarding Parliamentary control devised in conditions very different from those of to-day — are as complex as any. But progress is being made. In particular, the government accounts are being reorganised to match the accepted system of national accounting for the economy as a whole.

Meanwhile the statistics of public expenditure — past and future — cannot always be accepted as they stand. They are still, fundamentally, cash accounts with, occasionally, violent fluctuations which have to be smoothed out for a rational economic interpretation.

Exports

Some time ago, we published an article testing our predictions of the major economic variables during the previous two years against the facts (4). We concluded that our predictions of exports had been among the most unsuccessful. We had fallen victim to the universal psychological failings of forecasters: first to refuse to believe in the possibility of big changes; second to rely on simple extrapolation of the recent past. We may have done a little better since then — but we are still not very good.

So far as they go, our methods of predicting exports are quite obvious. We use four sources of information: statistics of export orders received by manufacturers (the statistics relate mainly to Engineering exports); manufacturers’ expectations given in the Konjunkturtest (which we tested against the facts and found only marginally useful); the trend of costs and prices in Britain compared with those in competing countries (which is clearly extremely important in the long term but which is not easily applied to the

short-term prospects); and the trend of economic activity in the principal markets. From these sources we can, of course, derive a sensible idea of the expected general trend of British exports—but a forecast of, say, a 4 per cent increase over 12 months rather than 5 per cent or 3 per cent will be correct—if it is correct—by luck rather than by science.

I have characterised fixed investment, government expenditure and exports as independent variables. The sum of forecast changes in these variables gives a first estimate of the forecast changes in consumption. We would, however, allow for the operation of a short-term multiplier effect—through the extra incomes generated by an increase in the non-consumption expenditures. If the three non-consumption variables together change by £100 millions, we would on that account alone expect a change of about £40 millions in consumption (5). We thus have a preliminary view of the forecast evolution of total expenditure and output.

The basic data from which this provisional estimate of expenditure has been built up are a mixture of estimates in terms of money and estimates in real terms. We must adjust those estimates which are in terms of money for a forecast of price developments. This is done only approximately at this stage of the exercise. I will come back later to the way we look at price developments.

Consumption

We then take a closer look at the probable evolution of consumers' income and expenditure, accepting the provisional view, already formed, of the probable development of total output.

The first stage is to estimate the future development of money incomes, beginning with the expected increase (it is always an increase) in standard or contractual rates of pay. We keep a fairly systematic record of the important claims for wage increases and of settlements made. This provides a very reasonable guide for forecasting the movement of the index of standard wage rates a few months ahead. Looking further into the future, we must take account of the influence on the labour market and wage bargaining of the expected movement of economic activity as a whole. As a basis for consideration we make use of an equation relating (with a time lag) the change in wage rates to the changes in unemployment (representing the pressure of demand in the labour market) and the changes in consumer prices, and adding a trend factor (6).

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(5) This very low multiplier is intended essentially to represent the consequences (within about 12 months) of deviations from trend in non-consumption expenditures. It is thus a rather limited application of the concept of the multiplier, super-imposed on longer term influences whose inter-action is less easy to quantify.

But actual pay of wage earners can increase either more or less
than standard wage rates. This is the problem of "wage drift". The
amount of wage drift is itself dependent on the state of business
activity generally. The amount of wage drift is in fact very roughly
correlated with the change in standard wage-rates, which itself is
correlated with unemployment and prices (7).

Thus we forecast average wage-earnings of manual workers.
For the pay of non-manual workers we can at present do no more than
extrapolate the past relationship between their pay and that of manual
workers. But we are now beginning to accumulate more figures
and detailed data about non-manual pay.

The next stage is to forecast employment, which deserves a
short digression. We are exploring in some detail the short-term
relationships between output and employment — including the
behaviour of productivity during the course of the business cycle.
The main conclusion is the familiar one — that employment is far
more stable than output. For manufacturing industry, for example,
we find that a quarterly change in employment (in percentages) is
about equal to one eighth of the percentage change in output in the
current quarter, plus one eighth of that in the previous quarter plus
another one tenth of that two quarters back (8).

Thus the fluctuations in employment are not only much less
violent than the changes in output; they also follow output with
a significant time lag. Average hours of work tend to change a
little ahead of employment. But behaviour differs in different in-
dustries and may differ much more between countries. We find,
for example, that in the United States employment is far more
sensitive to cyclical changes on output (9).

We are now experimenting with a slightly different hypothesis
(familiar to the students of demand analysis for durable consumer
goods). The assumption is that at a given point in time, there is
an « equilibrium » level of employment, appropriate to the level of
output, which employers seek, but temporarily fail to achieve. Thus
the movement of employment during the present quarter represents
an adjustment towards the level of employment required for the
output of, say, the previous quarter. Hence if output has been
rising and suddenly turns downward, employment will continue to
increase for about three months, and vice versa. Perhaps more
important, a deceleration in the rate of increase in output will not
relieve pressures on the labour market for some months.

(7) *The Wages Structure and some implications for incomes policy*, N. I. Economic
Review, November 1962, Appendix III.
(8) R.R. Neild, *Pricing and employment in the trade cycle*, Cambridge University
Press, 1963, page 33. But the equation does not fit the data particularly well (R² = 0.7).
(9) R.R. Neild, *op. cit.*, page 46.
To return to the main line of thought. Our provisional forecast of output enables us, by the procedures described, to forecast the change in average incomes of the employed labour force, the change in the numbers employed, and therefore the change in the total wage and salary bill.

I need not describe the other elements in forecasting the total incomes of the consumer sector — various social benefits, distributed profits and the incomes of farmers and other self-employers. This is done in fairly obvious ways, relying on rather approximate relationships between these forms of income and total output.

We have therefore a forecast of total incomes of consumers. These must be adjusted for payments of income tax to yield the change in disposable money incomes.

We now come to forecast expenditures on consumption. So far our attempts to find a reliable guide to short-term changes in the propensity to consume, or to save, have failed. We do little more than extrapolate a general and fairly persistent upward trend in the savings ratio. But we do modify this for two factors: (a) for any changes that have occurred, or seem likely to occur, in the amount of credit available to consumers — from hire-purchase, or from the banks; at certain periods, a change in the amount, or terms, of credit available has been a major cyclical factor; (b) for any marked divergence from the trend in the rate at which money incomes have been rising (on the general supposition, for which there is some empirical evidence, that consumption spending tends to fluctuate less than incomes).

We have now reached a forecast of consumers’ expenditure in terms of money. This must be converted into real terms. We must, in fact, attempt a forecast of price changes.

Prices

Our interpretation of the price mechanism in the short period is based on a very simple theory (10). This applies to both wholesale prices charged by manufacturers and to retail prices. The theory, which we have tested from the facts with a fair degree of success, is as follows. Entrepreneurs determining prices will take into account:

(a) the actual evolution of the prices of materials and fuel (for the economy as a whole, this means imports) over the previous few months (the best equation was got using a distributed lag of import prices for the current and the previous quarters);

(10) Described in more detail, with empirical justification, in R.R. Neild, op. cit.
(b) the movement of wages, using average earnings per hour (experiments with different lags suggested that the major weight is placed on the change in wages in the current quarter);

(c) the long-term trend of productivity — but not the short-term cyclical movements in productivity;

(d) a conventional mark-up, or margin, to cover other costs and a conventional rate of profit.

The result is — (i) a fairly regular upward trend of prices, both wholesale and retail, because average hourly earnings have increased faster than the long-term trend of productivity;

(ii) a marked cyclical fluctuation in profit rates associated very closely with the cyclical fluctuation in productivity.

Of course, the application of this formula needs to be supplemented by treating certain prices (and indeed taxes) as independent or exogenous. In forecasting retail prices we find it helpful to consider separately:

(a) food prices — depending on a forecast of "world prices" (because, as anyone concerned with the negotiations between EEC and Britain will remember only too well, British food prices are in principle equal to "world prices", and the farmers' income is supported by the taxpayer).

(b) Prices of items subject to Government policy liable to somewhat special influences. This covers rents, prices of fuel and most public transport, and direct tax rates.

(c) All other prices — nearly 60 per cent of the retail price index — to which the formula can be applied.

It will be seen that the main influence affecting short-term variations in the rate of increase of retail prices is changes in the rate of increase in wages. This means incidentally that small errors in forecasting the changes in money incomes do not much affect the forecast of real consumption — since such errors will be about offset by the consequent error in forecasting retail prices.

We now have estimates of all the elements in real expenditure except the changes in stocks.

*Stocks*

We have not yet discovered a reliable system of forecasting short period changes in the rate of accumulation of stocks — although this is an element of great importance in the cycle of economic activity. Over periods of a year or more it is possible to work with the idea of an equilibrium relationship between the level of stocks and
the level of output — a « normal » stock : output ratio towards which entrepreneurs are continually trying to adjust the actual level of stocks. But the deviations in shorter periods are very substantial.

However, these short period variations are found to be very closely linked with the level of imports. The import content of the stock change is probably well over 60 per cent. Hence the forecast of stock change is less important for forecasting output than it is for forecasting imports.

Imports

We have now built up a forecast of the changes in total real expenditure. To reach the forecast of output, we must subtract the change in imports, which can be considered in three stages:

(a) The change in imports of raw materials, oil, food required to match the provisionally forecast change in output and in expenditure;

(b) The change in imports for stock, which accounts for the largest part of the short-period changes in the level of imports;

(c) The change in imports of manufactured goods competing directly with domestic output. This is done largely by extrapolation of recent trends taking into account the rate at which domestic expenditure is expected to rise, the consequent pressures on domestic output, and developments in the relation between British and foreign prices. The essential thing is to be sure that the forecasts of imports and exports are reasonably consistent with each other in respect of the implications for relative competitiveness.

We have now reached the position in which we have forecast all items of expenditure and total output. This output forecast can be divided between industries in as much detail as we like, depending on the extent to which we can have confidence in detailed forecasts of expenditures, and on any knowledge of strains on production capacity in individual industries.

It will be noticed, of course, that in our forecasting of expenditure and incomes we have provisionally prejudged the outcome of the forecast of output. If the preliminary hypothesis is found to be inconsistent with the final result, then a painful process of re-estimation must be endured until consistency is achieved.

Implications of the forecasts

I said at the beginning that two of the key questions to ask, after the forecast is prepared, are:

(a) Does the forecast suggest strong pressures on the labour market?

and
(b) Does the forecast suggest a strain on the balance of payments?

There are many other questions of a similar kind that might be asked. But in present conditions the answers to these two questions are probably what influences the Government most in determining its conjunctural policy. Entrepreneurs who believe that the Government is mainly influenced by these considerations can if they wish use the economic forecasts to predict changes in Government policy and adjust their own plans appropriately.

(a) Pressures on the labour market:

In present conditions we have to regard the supply of labour as the limiting factor on growth of output. Some would be more precise, and suggest that the key statistical forecast is the forecast of unemployment, and that there exists a critical figure below which unemployment should not be allowed to fall. If the forecasts suggest that unemployment will fall to this critical point, the lags in the system are long enough to permit the Government to take deflationary action in good time.

The description above has shown how changes in employment can be predicted from output, with a time lag, the relationships being determined by the phase of the business cycle through which the economy is passing. But the relationship between changes in employment and changes in unemployment is not a simple one. First, there are, of course, the ordinary demographic factors responsible for changes in the distribution of population between age-groups, the sexes and marital states. This demographic change is currently adding rather less than 200,000 a year (less than 1%) to the labour force. More important, the actual number of people seeking work within each group can vary quite widely, according to the degree of pressure in the labour market (e.g., there is a "hidden reserve" of married women who appear to seek work in good times but not in bad; elderly people can adjust their date of retirement, etc.). Such people, who probably cannot be regarded as "permanent" members of the labour force, tend not to register themselves as unemployed in bad times (they may not be entitled to unemployment benefit). Thus we have found — as a rough guiding principle — that a fall of 1,000 in the number statistically registered as unemployed is accompanied by a rise of about 2,500 in the number employed, in addition to any increase in the labour force resulting from the normal demographic changes.

For these reasons, we can say that in average conditions (averaging all phases of the cycle) a rise of 5 per cent in output is accompanied by a rise of about 2½% per cent in productivity and a rise of 2½% per cent in employment (of which nearly 1 per cent is "demographic") and by a fall of only about 0.6 per cent (of the total labour force) in unemployment. In times of cyclical upturn a greater
rise in output accompanies a smaller fall in unemployment, and the reverse is true in times of stationary or declining activity.

I should add that one of the special and slightly alarming features of the present situation (described below) is that the rise in employment — the mobilisation of the "hidden reserve" of labour in a time of fast growing output — has not proceeded as fast as past experience would suggest. It is a common experience, of course, to find that as soon as a satisfactory statistical explanation of history is applied to a current situation, the explanation fails to operate efficiently!

(b) The balance of payments:

There is no time to go into detail on the balance of payments forecasts. I have described the estimates of imports and exports, and there is nothing of general methodological interest in the calculation of other items in the international accounts.

The British economic situation in 1964-65

May I, finally, illustrate some of this methodological discussion by applying it to the present situation and our expectations for the next twelve months? I am simply picking out a few features of our last Economic Review, published on May 15th and written in April and early May.

General Background

After nearly three years of a virtually stationary level of output, an upturn in economic activity began in early 1963. It was set going partly by a strong upturn in exports, itself the effect of the revival in world trends in 1962; and partly by deliberate Government action: reductions in taxes — both income taxes and indirect taxes, in particular on motor cars — increases in social benefits and expansion of public investment. The exact turning point is a little uncertain; events were complicated by the interruption to output and high unemployment of the severe winter weather in January-February 1963. But for over a year now (ignoring this temporary interruption), total output has been expanding at an annual rate of about 7 per cent. Exports have been rising at about this same rate and consumption much more slowly. Public investment and investment in housing has been rising faster still, but private investment only very slowly. In particular, capital expenditure by manufacturing industry, which has been falling, has probably only just begun to expand again; the forward indicators have foretold recovery for several months but (as on previous occasions) private capital expenditure follows the trend of total demand only after a very long interval. Accumulation of stocks began on a very large scale in the second half of last year and seems to have continued so far. This seems to be the main reason for the marked increase in imports which began almost a year ago, and which continued in the early months of this year.
Against this background, it should be remembered that the Government is now committed (or perhaps one should say about 75% committed) to a long-term rate of economic growth at the rate of 4 per cent a year. (The trend over the previous ten years or more was about 2\( \frac{1}{2} \) per cent a year.) But this 4 per cent growth rate, based on the programme formulated by the National Economic Development Council, was originally intended as an average during the period 1961 to 1966. The first year or more of this quinquennium passed with almost no increase in output. Hence the quite conscious policy was to push ahead for a time at an annual rate faster than 4 per cent. Whether the stimulus given was excessive is the central question for policy.

**Forecast**

Our forecast for the period up to the middle of 1965 (based on detailed consideration of the various elements, in the manner which I have described) is that the growth rate will slow down from about 7 per cent to about 5 per cent a year. There are several reasons for expecting this deceleration. The last Budget increased certain indirect taxes to an extent that would reduce the rise in real consumption by about 1\( \frac{1}{2} \) per cent. More important, we take the view that the rate of stock-building, already very high, will not increase further; it will not add anything more to the rate of increase in output. Moreover, two of the forces which stimulated the boom should begin to weaken: the expansion of public investment and house-building, and the quite remarkable boom in motor car buying. We expect the rate of increase in exports to decelerate a little, too. On the other hand, we must expect the increase in private investment to accelerate from about now.

We may now apply to this picture the two tests which I suggested — the pressure on the labour market and the pressure on the balance of payments.

The latest figure of unemployment, for May 1964, was 1.6 per cent (seasonally adjusted). It has been falling by about 0.2 per cent a quarter during the past year. The implication of the output forecast is that unemployment will continue to fall, though rather more slowly than in the past year. But well before the middle of 1965, it will be down to about 1 \( \frac{1}{4} \) per cent. The « critical point » for unemployment is much debated. Some would say that a figure of 1 \( \frac{1}{2} \) per cent is the danger point. Few would suggest that a healthy expansion can be kept going once unemployment falls as low as 1 per cent. By this test then, one must conclude that the rate of expansion of demand is too fast to be sustained for long. But to change the rate of expansion by Government policy takes a long time. The instruments for smooth and rapid adjustment do not exist. Hence at the beginning of 1964 we suggested that « policy should aim at moving the economy — smoothly if possible — on
to a 4 per cent growth path» (11). But we recognised that this would have to be done gradually. The major opportunity for adjustment comes each April, when the Chancellor of the Exchequer proposes tax changes in his Budget (only minor adjustments can be made at other times of the year). In April 1964, the Chancellor did in fact propose certain tax increases, taken into account in the forecasts just quoted. In our view, they were insufficient — though one cannot be so unrealistic as to ignore the exogenous influence of the approaching general election.

The Government is thus taking the risk of being forced (or of the next Government being forced) into uncomfortably severe action in the not very distant future.

The second test is the balance of payments. The current account, which yielded a surplus of £120 million in 1963, has deteriorated. It was probably in deficit to the extent of about £50 million in the first quarter. But the big reason for this was the very heavy rise in imports. This rise, as I have already suggested, seems to have contained a very large element of stock accumulation, which should not increase further. Even if stock accumulation remains at its present high rate, it should not in itself add further to imports. We therefore expect that imports will not increase much above their current level. If we are right in this, and in expecting exports to continue to increase, there will still be a deficit on current account this year and in the first part of 1965 — perhaps of the order of £150 to £200 million a year. The « overall deficit » (by which we mean the balance on current account and on long term capital account) may be about £300 million a year. Of this, perhaps £100 million may be regarded as the extent to which the current high level of stockbuilding exceeds the normal long-term average appropriate to a reasonable growth rate. It is thus a temporary feature and can reasonably be covered by the use of the reserves.

We would not, at this stage, regard the expected balance of payments in itself as dangerous. We have not yet reached a firmly based equilibrium in our underlying balance of payments position, but we are not so far away from such an equilibrium that the balance of payments deficit is a reason for drastic application of the brakes on the growth of output. But the forecast balance of payments deficit reinforces the case for a smooth and gentle deceleration of the growth in demand.

I should like to emphasize that my colleagues and I hold firmly that the central aim of Government management of the economy should be to secure a « fast » long-term rate of economic growth. We believe that to aim at a long-term rate of 4 per cent a year is feasible with our present economic structure (and much needed

improvements in our economic structure would make possible a higher rate). But this aim will not be achieved if confidence is impaired. And British industrialists have by now learnt that an excessively fast expansion leads to excessive pressure and to a violent change of direction in Government policy. Nothing could more effectively destroy confidence, and remove the incentives for investment in the long-term improvement of efficiency. It is fort these reasons that our forecasts lead us to press for a gentle application of the brake now.

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Compte rendu du débat

Le débat s'ouvre sous la présidence de Mme Duprez.

Indice des prix de gros (suite)

M. Lévy s'étonne que DULBEA n'ait pas suivi l'exemple du NIESR dans l'utilisation de l'indice des prix de gros pour l'élaboration de ses travaux.

Pour MM. Glejser et Saunders, il faut en trouver l'explication dans la différence de présentation de ces indices en Belgique et en Grande-Bretagne; dans ce dernier pays il est possible de dégager un indice pour les biens produits dans le pays et les biens importés.

Échanges de vues sur la conjoncture en Grande-Bretagne

Répondant à la question de M. Sterkendries de savoir si des échanges de vues existaient entre les différents instituts de recherches britanniques avant la publication finale des prévisions, M. Saunders répond par la négative, en affirmant que, même si de telles confrontations existaient, elles ne seraient pas de nature à influencer sensiblement l'opinion du NIESR sur la conjoncture.

M. De Ridder s'interroge sur les possibilités d'adaptation de la méthode du NIESR en cas de modification importante apportée au régime d'économie de marché par un nouveau gouvernement et il envisage plus particulièrement le cas d'un accroissement éventuel de la part du revenu du travail dans le revenu national.

Selon M. Saunders, la méthode retenue par le NIESR est suffisamment souple pour s'adapter à des modifications éventuelles de politique économique.

En réponse à une question de M. Verhægen, M. Saunders signale que le NIESR n'a pas retenu la méthode des leading-indicators vu que les revirements conjoncturels en Grande-Bretagne ont toujours été provoqués par des actes de politique gouvernementale.

M. Kirsch ten précise à ce propos que DULBEA a rejeté cette méthode étant donné son trop grand empirisme.
M. Levy s'infore au sujet de la méthode retenue par le NIESR lorsque les trois optiques de la comptabilité nationale trimestrielle donnent des estimations du P.N.B. différentes.

M. Saunders précise qu'en principe la moyenne arithmétique des trois estimations est retenue vu qu'aucune optique n'est supérieure aux deux autres mais qu'en cas de divergence d'une des optiques par rapport aux deux autres, le P.N.B. retenu est un compromis entre les 3 estimations après élimination de l'erreur la plus probable.

M. Sermon interroge M. Saunders sur la collaboration des entreprises britanniques à l'enquête concernant les profits et se demande si ceux-ci sont réellement trimestriels.

M. Saunders précise qu'au début de l'établissement de l'enquête, un petit nombre d'entreprises seulement disposait de chiffres trimestriels, mais que par la suite un certain effet d'imitation a joué parmi les autres.

En réponse à une question de M. Gleiser, M. Saunders signale que le NIESR a tenu compte, dans ses prévisions, de l'inflation dans le reste du monde bien que son influence ne soit pas aisément déterminable.

Rejoignant l'opinion exprimée par M. Kirschen, M. Saunders estime que l'élaboration d'un modèle complet présente d'énormes difficultés et qu'un modèle partiel traitant de quelques relations spécifiques peut donner des résultats généralement acceptables.