See VC

MR. INGHAM

Simulations on Treasury Model

The history of this case is as follows:

(i) In April 1982 the Treasury produced simulations using its model to show the effect of additional public expenditure, particularly on investment. The results were very adverse for the reflationist case. Output and unemployment were shown to be worse by the fourth year. This result came about following modifications which had been made to the model since 1979. (Under the Industry Act the Treasury is required to publish the model manual.)

(ii) These results caused a row, with the TUC accusing the Treasury of fiddling.

(iii) NEDO undertook to investigate and it has just published its report. This was taken note of at the September meeting of NEDC without comment which may indicate that the TUC has finally lost interest in this controversy.

(iv) NEDO's report shows that the latest version of the HMT model produces weaker correcting out effects than the version used for the original simulations.

Comment

(i) True that recent modifications of the model have reduced ~~correcting~~ crowding out effects but these are still strong. The initial increase in output is not sustained and unemployment is still shown to be higher at the end of a 5 year period. Too much emphasis is being placed on the differences in the two simulations and not enough in the new results themselves. These still do not validate the reflationist case.

(ii) The changes in the model do not stem from TUC or NEDO criticisms. The process of re-estimating equations goes on more or less continuously and the results are thus incorporated into the model.

(iii)

(iii) Danger of emphasising the role of the model in policy making - only one input. Other factors, eg expectations, are very difficult and cannot be given full weight in the model.

(iv) Relatively minor changes in the model do not imply any change in the views of Ministers.

(v) New simulations validate Ministers' views that most powerful force for reflation would be lower pay.

(vi) Treasury do not accept that it would be appropriate to combine looser monetary policy with higher public expenditure. Simulations show that this adds significantly to impact on inflation.

AT

13 October 1983

COVERING RESTRICTED

~~Mr Taylor~~
~~Fo~~

FROM: MRS C A RYDING
DATE: 17 OCTOBER 1983

File

MR TURNBULL

NEDC SIMULATIONS

Further to your telephone conversation with Sir Terence Burns on Thursday, 13 October, I attach a copy of NEDC(83)47 - Report
* on the Treasury Simulations presented to the Council in April 1982 which became available to the press that day.

2. Sir Terence thought that you might also find it helpful to see copies of NEDC(83)46 - The Role of Demand in the Economy,
* Comparison of Models - a background paper by NEDO staff on NEDC(83)46 and NEDC(83)47, and a note by John Odling-Smee to Sir Terence Burns. I understand that NEDC(83)46 and the paper on Comparison of Models are also available to the press on request.

C. A. Ryding
C A RYDING

* Papers filed with other NEDC papers in CF.

cc Mr Ingham.

AT 17/10 K9

FROM: J ODLING-SMEE
DATE: 29 SEPTEMBER 1982

SIR T BURNS
(NEDO Papers attached to top copy only)

cc Mr Middleton
Mr Anson
Mr Byatt
Mr Cassell
Mr Battishill
Mr Evans
Mr Lovell
Mrs Lomax
Mr Riley
Mr Mortimer
Mr Ritchie
Mr Hall

NEDC SIMULATIONS

Two of the papers that the NEDO Director-General has tabled to be noted but not discussed at the NEDC meeting on 29 September report simulations on the Treasury model. One fulfils a remit from the Council at the April 1982 meeting to examine in more detail some of the characteristics of the Treasury model. The other, on the role of demand, arose out of the discussion of competitiveness at the August 1982 Council meeting.*

Report on Treasury simulations presented to Council in April 1982

2. You will recall that the TUC accused the Treasury of rigging the simulations by choosing policy assumptions and a version of the model that maximised the "crowding-out" that resulted from a fiscal expansion. The NEDO paper investigates this charge indirectly (and without mentioning it explicitly) by:

(a) examining the various stages that the Treasury model went through before and after the version used for the NEDC simulations;

(b) commentating on the reasons for and consequences of changes in a few important equations (earnings, exchange rate, monetary sector, and corporate liquidity);

* There is also a background paper for advisers on comparisons between the Treasury model and those of NIESR, CEPG, LBS and Liverpool; and a fuller version of it which we have not yet seen. This may be useful to us for occasional reference.

(c) discussing the effects of different assumptions for monetary policy and cash limits.

3. The paper does not come up with anything that is new to us, although it is quite interesting to see some of the results set out like this since we do not often trace changes in model properties over a number of vintages. (More detail is presented in a Technical Annex that NEDO has made available to advisers, and in Professor Artis' report, which we have not yet seen.) The discussion is fair and balanced, and, as far as we can tell, correct. (They took our comments on earlier drafts.)

4. The conclusions are generally helpful to us. They confirm that the version of the Treasury model used for the NEDC simulations was the regular version used at the time, and not a specially "fixed" one. They do, however, point out that it happens to be the model with the most crowding-out of all variants of recent years (including the present one). But there is no suggestion that this was deliberate. And there is still significant crowding-out on the latest version of the model examined. They argue persuasively that models are bound to change all the time, and that this means that simulation results should be interpreted cautiously and their limitations recognised. It does not make them entirely useless for policy analysis.

The role of demand

5. The NEDO paper on this is relatively modest. After an introductory section in which nominal demand is distinguished from real demand, the rest of the paper reports simulations on the Treasury model of higher domestic demand (public investment), higher external demand (world trade), various types of better supply-side performance (better exports, better productivity and lower imports, and lower earnings growth), and combinations of these. Although we would not necessarily have done the simulations exactly like this - for instance, they do not seem to have included any announcement effects and their non-accommodating monetary policy is fixed £M3 - the broad results are not surprising. They show that demand expansions, whether domestic or external in origin, raise output for a few years but this is crowded out in time, and inflation also rises. There are, however,

combinations of demand expansion and supply-side improvements that avoid crowding out of the higher output and also avoid higher inflation.

6. The paper draws the conclusion for policy that a fiscal expansion might be useful if supply-side improvements could be made. But it recognises that this is exactly the problem the Council is trying to tackle, as yet without finding radically different solutions. If supply-side improvements cannot be made, a large-scale expansion of demand cannot reduce unemployment permanently unless the inflationary consequence of such action can be tackled successfully. This last phrase may be a reference to incomes policy.

Comments and line to take

7. These papers seem to have come out fairly well from the point of view of the Chancellor and the Treasury. In particular they:

(a) support the Government's position on the effects of fiscal expansion;

(b) emphasise the benefits of supply-side improvements (including slower earnings growth);

(c) discuss the role of model simulations in policy analysis in a balanced way;

(d) explain clearly why the Treasury model has changed and why that is an inevitable process given the uncertainties;

(e) do all this in a low-key and unprovocative style.

8. I suggest that the line to take, if any is necessary (the papers are not to be discussed, after all), should be that these are helpful papers and that they have successfully cleared up some of the questions left unresolved at the April 1982 and August 1982 Council meetings. If any further points need to be made, they can be drawn from paragraph 7 above.

JL O-S

J ODLING-SMEE