

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: *Econometric Models of Cyclical Behavior*, Vols. 1 and 2

Volume Author/Editor: Bert G. Hickman, ed.

Volume Publisher: UMI

Volume ISBN: 0-870-14232-1

Volume URL: <http://www.nber.org/books/hick72-1>

Publication Date: 1972

Chapter Title: *Comments On The Meeting*

Chapter Author: R. Agarwala

Chapter URL: <http://www.nber.org/chapters/c2792>

Chapter pages in book: (p. 1209 - 1210)

COMMENTS ON THE MEETING

R. AGARWALA · Economic Council of Canada

THE papers presented at the Conference constitute an important advance in econometric research insofar as they focus attention on the issues related to the performance of the models as a whole, rather than to individual equations or parameters. However, in spite of the wealth of research effort reported, certain important issues have been ignored.

1. The papers generally ignored the important point that the test of an econometric model depends on the uses to which it is to be put. Thus, if forecasting is the intended use, *ex ante* forecasting errors are the proper test, whereas if the model is to be used for policy analysis, it is better to estimate the errors in *ex post* fashion (outside the sample). This could mean that R. L. Cooper's tests, which use actual values of lagged endogenous variables, are largely irrelevant from a purely forecasting point of view. In real-world forecasting, one does not have the actual values of endogenous variables of the current quarter when forecasting for the next quarter. One, therefore, needs at least two- or three-period forecasts (using predicted lagged endogenous values) to assess the forecasting ability of the models. Since auto-regressive equations are at their best when actual lagged values of endogenous variables are used, Cooper's comparison is not fair from a forecasting point of view. When one is interested in policy analysis, actual lagged values may be used, but in that context, the auto-regressive equations do not provide an alternative way of computing the effects of policy changes, and comparison of econometric models with auto-regressive equations is thus, again, irrelevant

2. The papers on the three models demonstrated that if exogenous variables are kept on a steady path, the national income variable goes through cycles of the type experienced in the past. This finding may have an important implication for the debate on "fine-tuning" of public policies. This seems to imply that if the policy variables are kept on a steady path (as anti-fine-tuning theorists suggest), the economy will fluctuate because of the random shocks; and if these fluctuations are

unacceptable to society, we must try to improve our ability to forecast and control the economy, in spite of the limited success achieved so far.

3. One of the most important advantages of the econometric models for forecasting is that they are able to give not merely a point forecast (expected values), but also the range of expected variation. These forecasting errors are extremely difficult to compute for a large-size econometric model in an explicit algebraic manner. However, an approximation to these forecasting errors could, perhaps, be obtained by studying the standard deviation of the results produced by stochastic simulations. It might have been useful if this statistic were presented for the twenty-five-year simulations carried out with the various models.