Federal Reserve Bank of Minneapolis Quarterly Review

Summer 1979

A Way to Improve Economic Forecasting (p. 1)

Help for the Regional Economic Forecaster: Vector Autoregression (p. 2)

Estimating Vector Autoregressions Using Methods Not Based on Explicit Economic Theories (p. 8)

District Conditions (p. 16)



Federal Reserve Bank of Minneapolis Quarterly Review Vol. 3, No. 3

This publication primarily presents economic research aimed at improving policymaking by the Federal Reserve System and other governmental authorities.

-

Produced in the Research Department. Edited by Arthur J. Rolnick, Kathleen S. Rolfe, and Alan Struthers, Jr. Graphic design by Phil Swenson, Graphic Services Department.

Address requests for additional copies to the Research Department, Federal Reserve Bank, Minneapolis, Minnesota 55480.

Articles may be reprinted if the source is credited and the Research Department is provided with copies of reprints.

The views expressed herein are those of the authors and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.

District Conditions*

Although inflation has been higher than predicted, the Ninth District economy is still likely to continue to grow faster than the national economy for the rest of 1979 and through the middle of 1980.

Last Spring's Forecast: Optimistic and Mostly Right

Last spring, our regional econometric model¹ predicted that employment, our most basic measure of economic activity, would grow faster in the region than in the nation and that inflation would be slightly lower in the region than in the nation. So far, our predictions have turned out to be more right than wrong.

We predicted that regional employment would grow a healthy 3 to 3.5 percent over the year. Compared to most forecasts for the nation, this forecast for the region was decidedly optimistic; forecasts of national employment growth were mostly around 2 percent. Nevertheless, our forecast has so far proved accurate. Regional employment growth for the six months ending in June was 3.2 percent, in the middle of the predicted range.

One important reason economic growth in the region has been so strong is that the construction and manufacturing sectors of the regional economy have been doing well. Though applications for housing permits have been running somewhat behind last year's pace, commercial construction in the area has been booming. In July alone, the value of construction contracts awarded was over three times the value of those awarded in July a year ago. Not only is that an extraordinary one-month figure, but the cumulative total of contract awards for 1979 through July is 57 percent higher than the corresponding 1978 figure, indicating that this strong construction growth has been sustained for some time.² The manufacturing sector hasn't been doing quite that well, but it has had strong, sustained growth, too. District manufacturers responding to our most recent survey reported sales increases of 15 percent in the second quarter, somewhat larger even than in the first quarter.

Our forecast of inflation in the region was also optimistic compared to most nationwide forecasts, but it has so far turned out to be too low. The model's prediction was that inflation, as measured by the Minneapolis-St. Paul consumer price index, would be between 8.5 and 10 percent for 1979. Most forecasts of national inflation were around the upper end of this range. Our prediction was clearly optimistic, for regional inflation had exceeded national inflation substantially during 1978. So far this year, however, national inflation has been unexpectedly high and regional inflation has been approximately equal to it. Consequently, regional inflation for the first half of the year has been much higher than predicted: 13.2 percent.

The New Forecast: Less Optimistic But Still Positive

Even though the region's inflation is higher and closer to the nation's than predicted, we still expect the district's economy to be stronger than the nation's for the rest of 1979. In fact, we expect this to last at least through June 1980.

The latest forecast from our regional model is that from June 1979 to June 1980 employment growth in the region will be faster than in the nation, and inflation in the region will be about the same as in the nation. To be more exact, the model predicts that the region's employment growth will be about 2 percentage points faster than the nation's and that the region's increase in consumer prices will be roughly the same as the nation's. The model predicts that in June 1980 employment in the district will be about 3 per-

^{*}The Ninth Federal Reserve District consists of Minnesota, Montana, North and South Dakota, northwestern Wisconsin, and Upper Michigan.

¹For a description of our regional econometric model and its forecasting technique, see the preceding articles in this issue.

²The construction contract data are provided by the F. W. Dodge Division of the McGraw-Hill Information Systems Company.

cent higher than in June 1979, about the same annual growth we've been experiencing, and that inflation over this 12-month period will be about 11 percent, slightly lower than what we've been experiencing.

The model, however, does not take into account the grain shippers' strike that has halted crop shipments through the port of Duluth since July. This strike will probably lower some farmers' incomes and reduce employment, but we think it will hurt the economy of the region as a whole only a little. With all the new construction projects that must be completed and the substantial sales increases that manufacturers expect through the end of 1979, our forecast still appears feasible.