

## GREENBOOK FORECASTS AND THE BUSINESS CYCLE

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*Abstract:* Building on Sinclair, Joutz, and Stekler (2010), this paper examines the Federal Reserve Board's Greenbook forecasts of U.S. output growth, inflation, and the unemployment rate for potential biases. Standard tests typically fail to detect biases in current-quarter and one-quarter-ahead forecasts. However, impulse indicator saturation (IIS) detects economically large and highly significant time-varying biases for one-quarter-ahead forecasts. Biases depend on the variable being forecast, the forecast horizon, and the phase of the business cycle. IIS defines a generic procedure for examining forecast properties, it explains why standard tests fail to detect bias, and it provides a potential mechanism for improving forecasts.

*Keywords:* Autometrics, bias, Federal Reserve, forecasts, GDP, Greenbook, impulse indicator saturation, inflation, unemployment, United States.

*JEL classifications:* E58, C53.

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