Output Gap in Colombia: An Eclectic Approach

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In an economy conducted under an Inflation Targeting regime, the output gap becomes one of the most important variables to guide monetary policy. Defined as the difference between observed and potential or non-inflationary output, the gap is a measure of the state of aggregate demand and, therefore, of inflationary pressures on the economy. However, this relationship might be obscured by supply and price shocks, perhaps more relevant in the case of emerging economies. This paper estimates and evaluates the output gap for Colombia between 1970 and 2003 using a wide array of methods that go from univariate approaches such as Hodrick-Prescott (HP) and Band Pass filters to multivariate or structural methods obtained by the Kalman filter technique or the production function approach. We also include some mixed procedures like the multivariate filter and the prior-consistent filter. The last one takes into account some supply and price shocks observed in the Colombian economy since 1990. An evaluation of the different estimators is made by a simulated out-of sample forecasting exercise. The results show that multivariate structural filters have a better performance than pure mechanical approaches, but the difference is marginal with respect to a prior-consistent HP filter that takes into account supply shocks. In general, the forecasting performance of all the output gaps estimators improves when we re-define core inflation to exclude some price shocks.

Fuente: https://www.banrep.gov.co/es/output-gap-colombia-eclectic-approach