

Keep in mind

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Preliminary and delayed Colombian GDP reports are replaced with optimal in-sample now-casts of “true” GDP figures derived from a model for data revisions. The new GDP time series is augmented with optimal out-of-sample forecasts and back-casts of the “true” GDP figures derived from the same model. The trend-cycle component of the augmented GDP series is filtered. The resulting gap is more resistant than the ordinary HP filter to the end of sample optimal filtering problem as well as to GDP revisions and delays. The short term noise of the final output gap estimate is also reduced. Adjusting for data revisions and delays reduce the uncertainty of estimated gaps. The extended and further extended HP estimates of the output gap show an impressive efficiency gain with respect to the ordinary HP gap, 43% and 47%

respectively, on average. The new extension increases the efficiency in 7.4%, on average, with respect to extended HP estimates. These results constitute a benchmark to future work on real time estimation of the output gap under GDP revisions and delays in Colombia.

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