



## Is there a break-down of short-run Philips Curve: A panel data-based evidence from India

Razique Anwar and Atulan Guha

### Abstract

Most of the studies related to the Phillips Curve have remained confined to national-level or cross-country analysis. For India, no study took place during this current inflation-targeting regime. Whatever earlier study took place, they have used a yearly output gap, whereas we are using a monthly unemployment gap. Further, we have estimated using both accelerationist and New Keynesian Phillips Curve (NKPC) framework using lag inflation (accelerationist approach) and unit-level Inflation Expectations Household Survey (IEHS) data from the Reserve Bank of India (RBI) or lead inflation rate (NKPC approach) to capture people's perception of expected future inflation. We have estimated our equations using alternative specifications utilizing the panel data regression technique, essentially to find out the robustness of the estimation of the slope of the short-run Phillips curve. We found a positive relationship between the inflation and unemployment rates in all our specifications, which goes against the primary Phillips Curve convention of a negative relationship. Also, this result goes against the stagflation kind of explanation as this result is holding not only in the inflation targeting policy regime (inflation between 2 to 6 percent) but also when inflation rates are low (inflation below 2 percent). An explanation for this could be the specifics of the Indian economy, like the de-monetisation exercise of November 2016 and the introduction of the Goods and Services Tax in 2017. These structural changes may have created a trend of increasing unemployment rate. But then it is difficult to explain this positive relationship, mainly when we have controlled for crude oil prices and exchange rate. Thus, it is necessary to study whether we are getting similar results for other inflation-targeting countries or if it is true for emerging economies.

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