Why is "output gap" controversial?

There is a need to factor in hysteresis, especially for emerging economies

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THE MACROECONOMIC UNCERTAINTY in times of Covid pandemic is hard to measure. Economists and policymakers use the variable "output gap" to capture the "slack". It is a deviation between potential output and actual output, which is a standard representation of a "cycle". The potential output is an unobserved variable. There is an increasing concern about the way we measure the potential output—decomposing the output into trends and cycles. This is because the business cycle always is not a "cycle". Sometimes, the "cycle is the trend", as rightly argued by IMF Chief economist Gita Gopinath in her paper with Mark Aguir (*bit.ly/38vuOCd*).

When the macroeconomic crises and recessions tend to "permanently" push down the level of a country's GDP, it is inappropriate to assume that output will bounce back to previous levels. It is argued that the notion of output gap is ill-conceived and ill-measured. An IMF paper highlights the significance of hysteresis (the dependence of economic path on history) in analysing the output dynamics in crisis (*bit.ly/2WC06S9*). In the backdrop of Covid-19 crisis, there is a renewed interest in "hysteresis" and business cycles. The IMF paper argues that the state of the economy and the level of GDP are history-dependent ("hysteresis"). The hysteresis has urgent relevance for designing apt fiscal and monetary policies to tackle low demand during a recession.

The persistence of sluggish growth and weak macroeconomic recovery have robbed the sleep of many economic policymakers and academicians. For instance, in 2009, in the Economic Report of the US President for 2009, the Council of Economic Advisors (CEA) have forecasted a fast rebound of economic growth in the aftermath of global financial recession. However, the macro scholars have responded to CEA's claim—"recessions are followed by quick rebounds"—with vehement blog debates. (*bit.ly/2KqYbNT*). The debate was highly technical and predominantly based on whether the growth time series has unit-roots. With the empirical evidence of more than a decade, we know now that recession was not followed by quick growth rebound. The researchers identified that the secular fall in growth was due to the productivity slowdown, legacies of debt crisis, chronic deficiency of demand, labour market challenges and decline in the equilibrium real interest rates.

With zero lower bound on nominal interest rates, the monetary policy has proved inefficacious as a countercyclical policy tool to reset the economy to pre-crisis growth levels. The fiscal re-dominance at the same time, though desirous, has been bound to the fiscal austerity wave and tight fiscal rules. The world nations have missed the chance to reset the economy to the pre-crisis levels through "fiscal re-dominance".

The output gap is a crucial variable in the macroeconomic policymaking, by both central banks and the fiscal authorities. The central banks base their inflation targeting for setting the policy interest rate on the deviation of inflationary expectations from its nominal anchor and a measure of the output gap to capture the "economic slack". Similarly, fiscal authorities measure "cyclically-adjusted fiscal stance" to analyse public debt sustainability.

In India, MoF has not used cyclically neutral fiscal constructs for policymaking. However, RBI's inflation targeting is inclusive of output gap estimations. The recurrence of forecasting errors in growth by multilateral agencies, including IMF points to the fact that weak economic recovery was not widely expected. This led to a rethinking about "output gap" itself.

A recent blogpost in VoxEU by IMF economists pointed out that "the frequency of output gap discussions is positively correlated with a country's income level: 66% of IMF staff reports covering advanced economies mentioned the output gap, versus 29% for emerging markets, and only 5% for low-income countries. In the latter, structural issues are often of greater relevance". (*bit.ly/3h8b0Zg*). The IMF scholars found a limited connection between the size of the output gap and policy recommendations. They suggest caution in using output gap estimates for policymaking during the Covid-19 recovery. Ex-ante, a higher output gap is expected to be linked with a tighter monetary policy stance. However, analysing both levels and changes in output gaps and policy advice, they found only a slight positive link between the level of the output gap and the recommended tightening of monetary policy, but a very limited trend for fiscal policy and public debt management.

Economic cycles are defined as a succession of crises that followed periods of prosperity, though these peaks and troughs do not follow a given frequency or periodicity (*bit.ly/3h9xQ2C*). The assumption that demand shocks have only a transitory impact on the economy needs a relook. The persistent effects of recessions imply that "cycles" themselves affect the trend. With the persistence of cyclicality, the economy will not rebound to prior trend and persistence can be seen as the permanent "scars" left by the recession. In a crisis, the output gap may be extremely difficult to measure and more difficult to interpret. Empirical evidence does not support that demand shocks are transient. Even demand shocks can have a permanent impact on output. There are no obvious silver bullets that address the paucities of output gap construction, however. As argued by Romer (NBER, 2020) (*bit.ly/3pd7foi*), the use of "confidence intervals" when presenting output gap results and emphasising on both upside and downside risks in—Covid-19 induced crisis and growth recovery—policy discussions would be useful.

Though output gaps remain a popular measure for capturing "slacks", their relevance for policymaking in Covid-19 crisis is controversial due to the methodological challenges to arrive at the potential output. In the context of emerging economies, the business cycles and the level of economic growth need a different interpretation incorporating the "hysteresis".