

Intuition, not prediction

There is a difference between an estimate, a projection, and a forecast. Projections extrapolate on past trends. Forecasts are based on an economic model that uses data to forecast future economic magnitudes.

The Covid crisis makes “data driven” projections inaccurate, as the past provides zero guidance for the future. Traditional forecasting models have to be reshaped to account for the simultaneous supply-demand shock of Covid. Most gross domestic product (GDP) predictions are, therefore, estimates—best guess predictions.

Estimates use high-frequency data to make predictions, so their shelf life is limited. Hence, predictions made in April 2020 were far more optimistic than those made in May and June. In April, Fitch ratings, Barclays, Crisil, the Reserve Bank of India and the chief economic adviser were all projecting low, but still positive, growth. By mid-May, it was clear that the lockdown would paralyse the single market and collapse economic activity in high-income regions. Goldman Sachs therefore estimated that real GDP would fall by 5 per cent on the back of a 45 per cent slump in the second quarter of FY21.

But the provisional estimates released on May 29 estimated FY20 real GDP growth to be 4.2 per cent, significantly lower than the 5 per cent reported in the January advanced estimates. This steep fall was not due to the lockdown. India’s GDP growth has been slowing for some time. The estimate confirmed this trend.

We are, thus, dealing with a situation where there is a combination of a structural decline in GDP growth, and a major downward shock to that decline caused by the pandemic. We need to start thinking about analytical frameworks that address this.

The State Bank of India¹ (SBI) has attempted this. It builds on the GDP estimate for FY20 of 4.2 per cent

and constructs an analytical framework in which it estimates the total loss to date in GDP in different states, based on the extent to which Covid has impacted levels of economic activity. It also takes account of declining trends in high-frequency indicators such as vehicle registration and mobility.

It then calibrates this by taking a call on epidemiological trends. Using this analytical framework it estimates real GDP growth for FY21 to be (-) 6.8 per cent; 40 per cent of this loss will be due to a fall in net indirect taxes, while the rest will be due to a decline in economic activity.

I have attempted an analytical exercise, but for nominal GDP, with my colleague Amey Sapre², which takes the structural fall in GDP as the starting point. We then estimate the impact of the simultaneous supply and demand shocks caused by Covid.

We estimate the supply shock by assessing its impact on sector

output. Taking account of available information, we postulate a restoration factor—the fraction of FY20 value added that will be restored over the year, as Covid abates. We expect public administration, defence, energy, water supply to have a 100 per cent restoration. We take account of good recovery in the primary sector (80 per cent), middling recovery in manufacturing, financial and other urban services (70 per cent) and poor restoration in mining, construction, trade and hospitality (60 per cent). This gives us an 18.7 per cent reduction in gross value added (GVA) at basic prices as opposed to what would have been obtained if the crisis had not happened. This number is different from the simple calculation of reduction in GVA FY21 over GVA FY20 (-13 per cent), since that, in effect, assumes that zero growth would have happened without Covid.

On the demand side, we calculate losses to consumption expenditure, foreign trade, and fixed and

inventory investment. This gives us a 17.8 per cent reduction in GDP growth in FY21 as a result of the crisis corresponding to an 11.6 per cent decline over FY20.

This analysis presents a worst case scenario. It assumes that prices stay at FY20 levels. If this happens, the loss in GDP will correspond to the demand size estimate as quantity adjustment happens. If the price level rises, then the nominal GDP decline will be lower. If relative prices change such that the income effect is positive, the loss to GDP will be lower. If the savings GDP ratio falls, (i.e. there is no precautionary saving, the typical response to a crisis), then the fall in GDP will be further muted. Finally, given the size of the demand shock, a well-designed demand stimulus package down the line would significantly dampen the decline in FY21 GDP.

Our exercise, and that of SBI, are not predictions. They attempt to postulate scenarios that are based on (very different) analytical frameworks. They are useful for designing policy interventions as they allow these to be justified and calibrated based on an unfolding view of the evolving economic situation.

The Covid crisis has forced the economics profession to rethink fundamentals. Data-driven exercises have little value in times of extreme parametric change. Frameworks grounded in general equilibrium theory that require a story of price formation (administered or market) are paralysed when the same phenomenon (Covid) generates interactive supply and demand shocks. Good policy economics will therefore require us to propose analytical frameworks that can be used, inductively and iteratively, to design and calibrate policy. In the age of Covid, intuitive thinking, not cheap computing power will, once again, do the heavy lifting.

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1. SBI Ecowrap no. 14, 26 May 2020

2. “GDP scenarios”, NIPFP working paper, forthcoming, July



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