On Data and Decision-making*

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While evidence on GDP growth suggests that India remains a high growth economy, with marginal deceleration, "perceptions on the ground" point to sluggish growth of the real economy. This is easily explained in the case of agriculture. Three seasons of indifferent monsoons and/or unseasonal rains have indeed affected crop production. So the real question is whether the evidence on industrial growth supports the claim of dynamism.

Measuring industrial growth is confusing because there are different "official" sources providing evidence on industrial production or value added, which often do not match. The most up-to-date information comes in the form of the <u>Index of</u> <u>Industrial Production</u> (IIP), which is the lead indicator of changes in production in the registered manufacturing sector.

However, the <u>Annual Survey of Industries</u> (ASI) is considered a better source of information on the manufacturing sector, since it is the most detailed source for firmlevel data on the registered manufacturing sector including on output. This combines a census of larger units in the registered manufacturing sector based on employment, and a sample survey based estimation for the rest of the sector. It covers units with 100 or more workers and in a few selected sectors on a Census basis and adopts a rigorous sampling procedure for the rest of the registered manufacturing sector. Reporting percentages by units included in the universe or sample are also high.

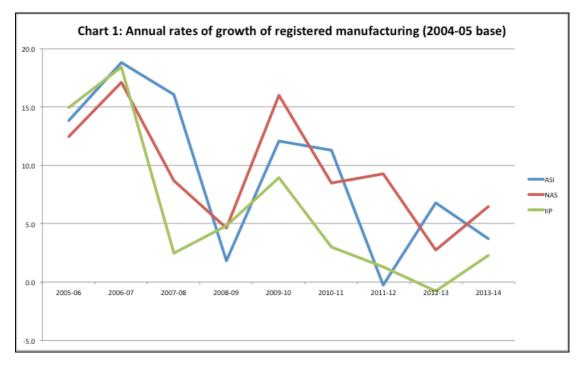
On the other hand, the coverage of the IIP and defaults in reporting by sampled units makes it a far less reliable indicator, with its main strength being the much shorter lag with which the IIP for each month is computed and released.

Finally, the National Accounts Statistics (NAS) provided quarterly by the <u>Central</u> <u>Statistical Organization</u> (CSO), give separate figures for GDP or value added in the registered and unregistered manufacturing sectors. But given the coverage of the IIP and the ASI, a comparison of growth trends revealed by the three sources of data is only possible for the registered sector. One difficulty is that from 2013-14, when figures from the NAS are available only for a new series based on 2011-12 as base, the recent figures are not really comparable with the earlier figures based on the old series with 2004-05 as base.

Chart 1 presents a comparison of the annual, year-on-year growth rates as revealed by data from the three sources, including the NAS with base year 2004-05. One conclusion that can be drawn from the Chart is that all three sources suggest that while there have been considerable variations in growth rates over the period 2005-06 to 2013-14, there are clear signs of a deceleration in the annual rate of growth over the period. Second, starting from 2007-08, there are significant divergences in the rates of growth that data from the three sources yield. On average, the IIP delivers a much lower growth rate than the ASI. But the rates of growth computed from the ASI and the NAS seem to vary haphazardly, with one or the other indicating higher rates of growth in different years. This is surprising, since at least in the NAS series with

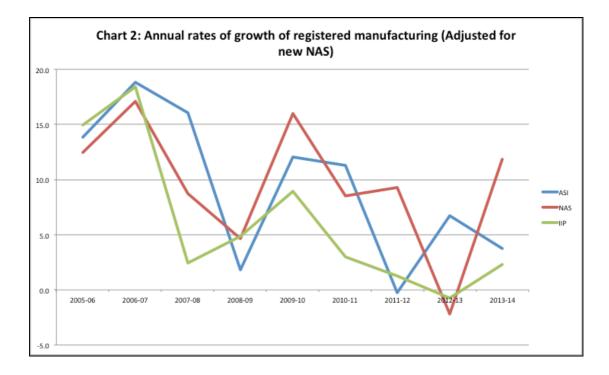
2004-05 base, the national accounts division of the CSO is supposed to be basing its estimates of GDP in the registered manufacturing sector on evidence from the ASI.

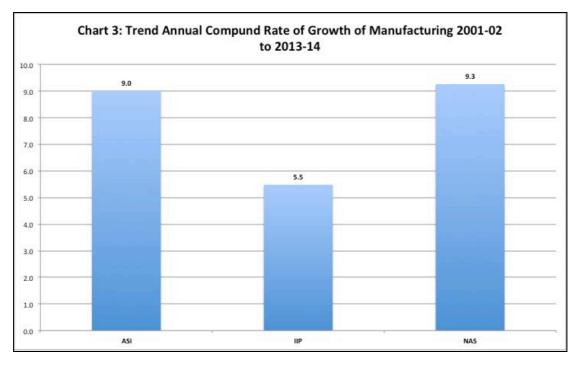
Finally, when an adjustment is made to capture growth rates for 2012-13 and 2013-14 from the new series of the NAS with 2011-12 as base (Chart 2), registered manufacturing growth in 2012-13 turns out to be much lower than earlier, and that for 2013-14 much higher, making the divergence between the three series much greater. This is not surprising, because an important revision in the 2011-12 base series is the shift away from the ASI to the <u>Ministry of Corporate Affairs</u> (MCA) corporate finances database for estimating registered private sector manufacturing value added. This has substantially altered estimates of value added in registered manufacturing.



Finally, when a trend growth rate over a longer period 2001-02 to 2013-14 is calculated using data from the three sources (Chart 3), while the ASI and NAS show growth rates of 9 and 9.3 per cent per annum respectively, the IIP points to a much lower trend growth rate of 5.5 per cent. The reduced differential between the ASI and the NAS is, however, no cause for comfort, since it is merely the freak result of the way in which trends neutralise very different deviations in annual figures in the longer term.

And matters can vary significantly when the initial and terminal dates are changed. Thus, a comparison of growth rates of manufacturing production as captured by the constant price figures of registered manufacturing GDP in the NAS, the real value added in registered manufacturing obtained by deflating nominal values from the ASI with the implicit deflator for manufacturing GDP in the NAS, and the IIP for manufacturing over the decade ending 2011-12 reveals a different picture. Over the decade as a whole the annual compound rate of growth of manufacturing turns out to be 10.1 per cent in the case of the NAS, 12.8 per cent in the case of the ASI, and 9.8 per cent in the case of the IIP. In this case, therefore, movements captured by the NAS are closer to those reflected by the IIP rather than the ASI.





All this reveals the mess in the official statistics on which debates on Indian economic growth are conducted. A base revision in the NAS statistics substantially alters the level of and growth trend in GDP. And information from alternate sources gives a widely varying impression on the pace of industrial growth. Note that the divergence discussed above is only with respect to the aggregates. Disaggregated figures at the two-digit level and relating to different states (say) would yield much larger deviations.

This may be all right for those wanting some data source to suit their inclinations. But for those turning to this data to make reasoned judgements on investment in durable capital assets, it may be better to rely on informed impressions at the ground level than on official figures that are ostensibly meticulously constructed.

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