The Industrial Growth Conundrum



C.P. Chandrasekhar

According to a media report ("2011-12 GDP growth revised upwards", Business Line, January 12, 2014) quoting sources in the Economic Advisory Council (EAC) to the Prime Minister, when the Central Statistical Organisation releases the second revision of the GDP estimates for 2011-12 later this month, GDP growth for that year would be revised upwards from 6.2 to 7 per cent. This is ostensibly the result of the recomputation of manufacturing value added based on data from the Annual Survey of Industries (ASI) rather than on the Index of Industrial Production (IIP). The latter is considered a less reliable indicator than the former, which is based on better and wider coverage of the registered manufacturing sector. However, IIP figures appear much earlier than the ASI numbers do, requiring early estimates of GDP in registered manufacturing to be based on the former.

In the case of 2011-12, the ASI does indeed report an increase in real value added in registered manufacturing of 9.1 per cent, whereas the IIP for manufacturing points to growth of production of 3 per cent. National Accounts Statistics (NAS) too record an increase in GDP in registered manufacturing at constant prices of 2.6 per cent in 2011-12. So if GDP estimates are revised based on the ASI numbers some increase in GDP is to be expected.

Though it is unclear why the office of the EAC should be involved in the revision process and in leaking such information (assuming what has been reported is true), the fact remains that the ASI is indeed a better source of information on the manufacturing sector. It covers units with more than 100 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

strength being the much shorter lag with which the IIP for each month is computed and released.

That having been said, 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 more complex 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 (Chart 1). Thus, over the longer run, the deviation in growth rates as measured by these different indices is such that movements captured by the NAS are closer to those reflected by the IIP rather than the ASI.



When simple annual rates are compared, the magnitude and direction of the deviations vary over time. As Chart 2 shows, over the five years from 2002-03 to 2006-07, rates of growth as measured by the NAS are closer to those measured by the IIP than by those computed using the NAS. In 2007-08 and 2008-09 growth as measured by the IIP and the NAS were close and differed significantly from that measured by GDP numbers for the registered manufacturing sector in the NAS. It was only in 2009-10 and 2010-11 that there was a greater degree of correspondence between the NAS figures and the ASI figures. And, finally, we now have the disputed 2011-12 figure when the IIP and NAS matched, but the ASI-based number was very different.

In sum, there is no reason to conclude that when national income estimates go through their various stages of revision, the growth of GDP in registered manufacturing is first driven by trends in the IIP and then aligns itself with the growth in value added or output as measured by the ASI. This maybe what should happen in principle, but does not seem to occur in practice. The CSO obviously either trusts (or distrusts) the IIP and the ASI equally, or has its own method of constructing estimates of value added in registered manufacturing. So whatever happens with the GDP figure for 2011-12, the reasons are not obvious.

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