

Building a reliable database of the Indian economy

Several initiatives are progressively putting the database of the economy on a much firmer footing than in the past. The results should begin to show by the end of this year

SUDIPTO MUNDLE

is emeritus professor at the National Institute of Public Finance and Policy and was a member of the Fourteenth Finance Commission.

The ministry of statistics and programme implementation (Mospi) is often in the news for all the wrong reasons. It is criticized for the poor quality of data, gaps in the data or delays in the release of data. However, several initiatives are progressively putting the database of the Indian economy on a much firmer footing than in the past. The results should begin to show by the end of this year.

The data on employment and unemployment has been the subject of much controversy lately. Generating data on employment for a country like India, with its dualistic structure, is particularly challenging. Over half the labour force is still dependent on agriculture, where the rhythm of production follows the weather cycle with long periods of seasonal unemployment between crops. Further, thanks to the high pressure of population on land and continuing land fragmentation, the phenomenon of what economists call underemployment or 'disguised unemployment' is widespread. To illustrate, a family of five people may be cultivating a tiny plot of land which actually requires only two people working full-time. Everyone is underemployed and the production may be no more than what two people could have produced, i.e., zero productivity for the three superfluous workers.

A similar problem of low productivity, low wage, underemployment is also faced in the millions of small and tiny unorganized sector enterprises that account for the bulk of non-agricultural employment as well. Thus, underemployment affects virtually the entire workforce in the country except the small proportion who are employed in the organized sector. Conventional concepts of employment used in the advanced countries are not of much use in measuring employment or unemployment in such a context.

The National Sample Survey Office (NSSO) has addressed the problem through a clever technique of measuring a sampled person's time disposition using multiple concepts: usual status, daily status and weekly status. By collecting data on employment through large sophisticated surveys of inter-penetrating samples and using these multiple employment concepts, the NSSO has been generating fairly reliable estimates of both open unemployment and underemployment for several decades.

However, since the employment-unemployment survey is an elaborate and costly operation, it is undertaken only once every five years. Such quinquennial estimates of unemployment are obviously inadequate for macro-economic policy, which requires up-to-date information at least annually, if not more frequently. In fact, no NSS estimates of employment are available since 2011-12. Unfortunately, the more recent Labour Bureau surveys have been largely ignored, and all sorts of humbug estimates are put out to fill the gap.

As professor Shibdas Bandhopadhyay of the Indian Statistical Institute would wryly observe when we worked together as members of the

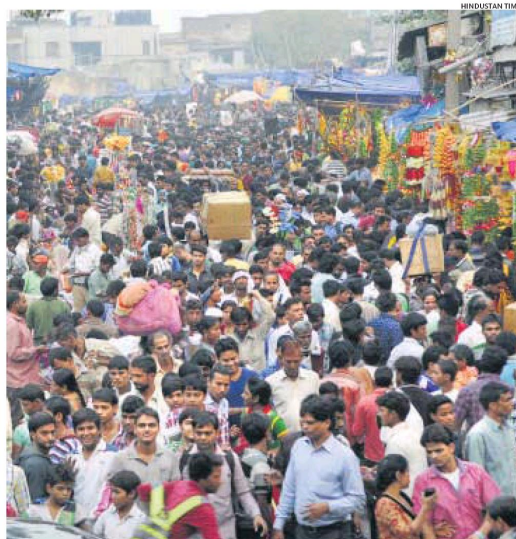
National Statistical Commission (NSC) a few years ago, "there are lots of numbers but no data". A flourishing cottage industry is now engaged in discussing the pros and cons of using such numbers that were never intended to measure employment in the first place. Meanwhile, researchers and analysts hungry for estimates quote and use these numbers for various purposes.

This situation is about to change. The NSSO has replaced the old series of quinquennial employment-unemployment estimates with a new survey series, the periodic labour force survey (PLFS), that matches the different production cycles of the agricultural and non-agricultural sectors. Urban employment surveys are now being conducted every quarter to give us quarterly estimates of urban employment covering most of the non-agricultural sector. Rural surveys are being conducted annually to give us annual estimates of rural employment, and underemployment, covering most of the agricultural sector. The urban and rural estimates are being combined to give us annual estimates of total employment. Survey data collected for 2017-18 is now being processed and the first annual PLFS estimate of total employment, unemployment and underemployment will be available by the end of this calendar year. This will mark a sea change in employment and other derivative estimates.

The second area where there is a marked strengthening of the database is the use of the ministry of corporate affairs (MCA) data from 2011-12 onwards. It is mandatory for all companies registered with the MCA to submit their audited balance sheets. This database, covering over 500,000 companies, is vast compared to the annual survey of industries (ASI) data that was used earlier for the industrial sector and the RBI data for some 2,500 companies that was used in the case of services for estimating gross domestic product (GDP) in these sectors.

However the unit of observation in this database is the company, not the producing establishment as under the ASI. A company may be in multiple lines of production, providing industrial products as well as services out of multiple establishments located in many states and even abroad. Hence the MCA data is not conceptually comparable to the earlier ASI data where the unit of observation was the individual industrial establishment. It is also not possible to readily disaggregate MCA data on value of output, costs, etc., by industrial sectors or by states, as could be done with ASI data.

National income estimates since 2012-13 have been partly based on the new MCA database. There are also other conceptual differences between the old series (2004-05 base) and the new series (2011-12 base) which is now better aligned with the internationally accepted United Nations System of National Accounts. Since the MCA database is not available for earlier years, Mospi has not projected the new series (2011-12 base) backwards for earlier years as was done



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before whenever national income estimates were shifted from an old base year to a new base year. However, national income estimates based on both the old and new series are available for the three years: 2012-13, 2013-14 and 2014-15. These indicate that growth rates based on the new series are significantly higher than those based on the old series.

This has generated a huge controversy. While many independent analysts have directly questioned the credibility of the new national income series, even official sources like the Reserve Bank of India and the chief economic adviser have hinted at their discomfort with the new series. It is essential that Mospi takes the initiative to generate the back series of national income estimates, as in the past, to try and resolve this issue. Fortunately, a committee set up by the NSC is now actively addressing this matter. In addition to the MCA data, the ASI data series needs to be continued and used in combination with the MCA data to generate sector-wise and state-wise industrial production data that are consistent with the MCA aggregates. Further, an annual survey of services sector (ASSS) series needs to be introduced for the services sectors similar to the ASI for industrial sec-

tors. Reportedly, such an ASSS series is now work in progress.

The MCA data combined with the ASI and ASSS should give us fairly robust estimates of output, value added, etc., for the organized sector companies registered with the MCA. But this would still exclude the entire non-agricultural unorganized sector consisting of some 63 million small and tiny enterprises employing around 111 million workers (see my *Mint* column of 15 September 2017 *bit.ly/2thWDP*). The unorganized sector has remained the most important gap in the database of the Indian economy, though it employs the bulk of the non-agricultural workforce. Fortunately, our data blindness for this sector has been considerably reduced in recent years by the NSS surveys of such unorganized (unregistered) sector enterprises. Starting in 2000-01, these quinquennial surveys alternatively covered industrial and service enterprises and now cover both industries and services in the same survey. Indeed, it is from such an enterprise survey of the NSS 73rd round (2015-16) that we know there are around 63 million such unorganized sector enterprises.

Since these surveys are conducted quinquennially, the data for the intervening years is projected using the ASI-based organized sector growth rate for industry and other organized sector proxies for the services sector. This is clearly unsatisfactory since there is no reason to expect that the organized and unorganized sector enterprises will behave similarly. The PLFS employment data that will be available henceforth will provide a much firmer foundation for such projections. Further, business registers being prepared by the states will provide a sound sample frame for the NSS enterprise surveys.

This data, projected forward using PLFS employment data, combined with the MCA, ASI and ASSS data bases will give us a much more robust estimate of GDP for the non-agricultural sector, and hence for the economy as a whole.

The initiatives discussed above do not cover all the data problems pertaining to the Indian economy. Data on agricultural production is still based on unreliable archaic procedures while the recommendations of several committees for improving this data remain unimplemented. The use of wholesale prices as proxies for producer prices continues to confound the analysis of price and real output trends. Poor quality state-level statistics and missing micro-macro data linkages require strengthening capacity in state statistical bureaux, a challenging task. These persisting problems notwithstanding, the improvements in data sources discussed above should give us a much more robust data base for the Indian economy by the end of this year.

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