THEIR VIEW

Unravelling the complexities of India's 2011-12 GDP series is key

Gross domestic product estimation is complex and its details need to be understood in depth for effective policy and research

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GDP numbers are commonplace in macroeconomic discussions. However, the numbers involve several complexities, ranging from data, methods, revisions, base year changes and the challenges of a changing economy. While data, methods or revisions are an ongoing part of the compilation exercise, base-year revisions stand out separately.

The rationale for periodically updating the base year in national accounts lies in capturing structural transformations within an economy. In the Indian context, base year revisions traditionally occurred every five years, which were aligned with the quinquennial surveys conducted by the National Sample Survey Office (NSSO). Nevertheless, since 2004-05, our base year revisions have experienced a staggered pattern due to a multitude of factors.

The financial crisis of 2009-10 prompted the selection of 2011-12 as the base year instead of 2010-11, with the revised series only being unveiled in 2015. Throughout the decade following the last base year revision (2011-12), the Indian economy underwent a series of significant structural shifts, policy-induced macro-economic changes and covid-induced economic crises. Regrettably, these developments were not fully captured due to the unavailability of a suitable 'normal' year to serve as the base, updated data and the irregular scheduling of NSSO surveys during this period.

In the 2011-12 series, numerous conceptual and statistical changes were incorporated, with the aim of aligning the series with recommendations of the System of National Accounts (SNA) 2008. These changes resulted in significant revisions to the levels and growth rates of various sub-sectors, ultimately impacting the trends of aggregate gross domestic product (GDP).

Traditionally, in India, GDP referred to GDP at factor cost (FC). Following SNA guidelines, "Gross Value Added (GVA) at Basic Prices was introduced as a new aggregate," while the new reference for GDP became "GDP at Market Prices."

The differences between these aggregates are due to a segregation of production and product taxes. Production taxes remain invariant with the level of output, such as stamp duty or registration fees, while product taxes include ad-valorem or indirect taxes, like VAT or GST. In the disaggregated national accounts statements, the net values of production taxes and subsidies are presented separately, facilitating the reconstruction of the previous GDP at aggregate FC for comparison purposes. Notably, the distinction between GDP FC and GVA at Basic Prices holds implications for sub-sectors that get subsidies. However, at the aggregate level, the difference in monetary values is marginal.

The 2011-12 series of GDP saw significant conceptual changes that aimed to improve the coverage and relevance of major macro aggregates. One notable addition was the inclusion of a new class of assets, namely Intellectual Property and Cultivated Biological resources, under Gross Capital Formation. This addition, following international conventions, recognized the growing importance of intangible assets in modern economies and demonstrated a shift in the understanding of what contributes to economic growth.

Another significant change was the capitalization of Research and Development (R&D) expenditure by government, public and private corporations. In the previous series, R&D was treated as intermediate consumption. However, following the SNA recommendation, R&D output was capitalized as 'intellectual property products,' acknowledging its role in fostering innovation and driving long-term economic growth.

The 2011-12 series also introduced changes in the treatment of Private Final Consumption Expenditure (PFCE) of households. Expenditures on gold and silver were previously considered consumption expenditures, and in the new series, they were reclassified as 'valuables' under capital formation. This change highlighted the role of such spending as a store of wealth and a form of investment, rather than simple consumption.

Additionally, the 2011-12 series saw major revisions in the methodology and estimates in several subsectors, such as organized manufacturing and the services sector. For example, the incorporation of the MCA21 database improved coverage of registered companies in manufacturing and services, while the new Effective Labour Input method for estimating value added in the unincorporated manufacturing and services sector took into account the differing marginal productivity of various types of workers. Unincorporated enterprises that maintained books of accounts were reclassified as 'quasi corporations' and included in the Private Corporate Sector instead of the Household sector. This shift resulted in an increase in private corporate sector estimates and a drop in the household sector, compared to the 2004-05 series. Additionally, coverage was extended to major municipal bodies and autonomous institutions, ensuring a broader representation of economic activities.

A new Effective Labour Input method was also introduced for estimating value added in the unincorporated (i.e., household) manufacturing and services sector. This method estimates GVA per worker based on the different marginal productivity of three types of workers: Owner, Hired and Helper. In contrast, the 2004-05 series treated all workers as homogeneous and estimated GVA based on average worker productivity. This change was aimed at providing a more nuanced understanding of labour contributions to growth.

Furthermore, the services sector expanded to include NBFCs, regulatory bodies and services of stockbrokers, mutual funds and pension funds, for which data was limited or unavailable in the 2004-05 series. Lastly, the output of the Reserve Bank of India (RBI) underwent a methodological change. Previously calculated as a mix of market and non-market output, the new series considers the entire output of RBI as a non-market activity and measures it using the cost approach. These base year changes were collectively aimed at enhancing the coverage and sources of value addition, thus providing policymakers and stakeholders with more reliable data to inform their decisions.

However, despite improvements, the 2011-12 series faces numerous issues, ranging from methodological concerns to data inconsistencies. In our next column, we will discuss these challenges, including the implementation of base year changes, the use of outdated data sources and the impact of a rapidly evolving economy on GDP estimation. We will also explore the policymaking implications of these shortcomings and the overall reliability of the series as a tool for economic analysis.