

ARTICLE 2

Revisiting India's GDP Revisions: Methodological Changes and the Debate on Manufacturing Growth

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Abstract

The revision of India's GDP series with a new base year sparked considerable debate within academic, policy, and media circles. While base year revisions typically yield marginal changes in the absolute size of GDP and growth rates, the latest revision exhibited a distinctive pattern. The overall GDP size in the base year declined marginally, yet the growth rates for subsequent years, especially for 2013–14, increased significantly. This article analyses the methodological and data-related changes in the new series and explores the basis of the controversy. It highlights key sectors, the incorporation of new data sources, and expert critiques, ultimately arguing that while methodological improvements have occurred, comparability issues and data quality concerns persist.

Keywords

Financial Audit, State Government Accounts, General and Social Sector (GSS), Economic Sector (ES), Voucher Sampling, Audit Objections, Risk-Based Auditing and Audit Management Group (AMG).

2.1 Introduction: Understanding the Controversy

Revisions to GDP estimates are a routine statistical exercise intended to reflect changes in the structure of the economy and to improve accuracy using updated methodologies and datasets. Typically, such revisions lead to slight increases in the absolute size of GDP without significantly altering growth trajectories. However, the new GDP series based on the 2011–12 base year deviated from this norm. The revised series showed a marginal decline in the base year GDP size but significantly higher growth rates in subsequent years. For instance, the GDP growth for 2013–14 jumped from 4.8% in the old series to 6.2% in the new series. Manufacturing growth also recorded a substantial improvement.

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This has led to concerns, especially since macroeconomic indicators such as credit growth, investment, and exports have not reflected similar buoyancy. This mismatch has raised questions about the underlying assumptions and data sources used in the revised estimates.

2.2 Key Methodological Changes

Several notable changes were introduced in the new series. These changes not only impacted the size and growth estimates of GDP but also altered the sectoral contributions significantly. The most important modifications for our analysis of growth changes in the manufacturing and trade sector are as follows:

2.2.1 Use of MCA-21 Data for Corporate Sector

The old series relied on the Reserve Bank of India's (RBI) sample studies of approximately 2,500 companies. In contrast, the new series leveraged data from the Ministry of Corporate Affairs' (MCA) MCA-21 database, encompassing over 5.2 lakh non-financial companies. This larger, digital dataset allowed for more comprehensive coverage but introduced new challenges regarding data quality, completeness, and consistency.

2.2.2 Effective Labour Input Method for Informal Sector

The old labour input (LI) method assumed equal productivity across different worker categories. The revised series adopted the Effective Labour Input method, which assigns productivity-based weights to various categories of workers. The weights were based on the data from establishments covered in the NSS 67th round Survey on unincorporated Enterprises, 2010-11 (Table 2.1)

Table 2.1: Different Weights to Different Workers: 67th Round

Activity	Owner	Hired	Helper
Trade & Repairs	0.66	1.00	0.28
Hotels & Restaurants	0.63	1.00	0.35
Transport	0.33	1.00	0.38
Communication	0.32	1.00	0.37
Real estate & professional services	0.76	1.00	0.16
Education	1.29	1.00	0.44
Health	0.73	1.00	0.25
Other services	1.09	1.00	0.00

Source: Rajakumar and Shetty (2015)



2.2.3 Revised Estimates for the Trade Sector

Value addition in the unorganised trade sector was re-estimated using updated data from the 67th Round (2010–11) of the NSSO's employment survey, instead of relying on outdated 1999–2000 data as in the old series. The old series imputed employment growth of 2.8% annually for the unorganised trade sector between 1999–2000 and 2004–05, which significantly overstated its contribution. The new series reported a much lower annual employment growth of 0.8% for the period 2004–05 to 2011–12.

Additionally, sales tax data was incorporated into the new estimates. As a result, the gross value added (GVA) from trade and repair services fell by nearly 39.4%, and the trade sector's share in GDP declined from 15.9% to 9.7%.

2.2.4 Establishment to Enterprise based

Moreover, the new series shifted from the concept of 'establishment' to 'enterprise'. This change allowed the Central Statistics Office (CSO) to account for activities—such as marketing, logistics, and finance—conducted at head offices, particularly in large firms like Reliance. Consequently, manufacturing value added increased sharply due to this broader scope.

2.3 Implications of the Revisions

The changes in data sources and methodologies caused significant shifts in sectoral shares and absolute GDP values (Table 2.2 and Table 2.3). In the base year 2011–12:

- The absolute GDP in the new series was 2.2% lower than the old series.
- Industrial sector GDP was 18% higher in the new series.
- Services sector GDP was 14.2% lower, with trade-related activities showing a 31.5% decline.
- The industry's share in GDP rose from 27.2% to 33.1%, while the services share dropped from 54.8% to 48.6%.

These changes call into question the comparability between the old and new series. Although the methodologies are more refined, they result in a structural break, making it difficult to draw continuous time-series conclusions about growth patterns.

2.4 Expert Critiques and Concerns

Numerous experts have critiqued the assumptions and practices followed in constructing the new series. Major concerns stand out with regard to the use of the MCA-21 database:

2.4.1. Blow-Up Factors for Non-Reporting Firms

The CSO assumed that non-reporting firms contribute positively to GDP and used a blow-up factor based on paid-up capital to adjust for these firms. Critics, including former Chief Statistician Pronab Sen, argue that such assumptions lack empirical justification and could lead to overestimation.

Table 2.2: GVA at FC by Economic Activity at Current Prices (%)

Industry	2011-12	2012-13	2013-14
1. Agriculture	103.7	105.2	102.4
2. Industry	118.2	119.4	123.2
Mining & quarrying	116.5	127.3	133.4
Manufacturing	118.8	124.0	132.5
Electricity Gas, etc	149.2	139.3	121.0
Construction	111.6	104.9	105.6
3. Services	85.8	87.0	89.4
Trade, hotels, transport, etc	68.5	71.5	77.5
Finance, real estate, etc.	109.3	109.8	105.1
Public administration, etc	88.6	86.4	89.0
GVA at Factor Cost	97.8	98.7	100.1

Source: Rajakumar and Shetty (2015)

Table 2.3: Contribution of Economic Activities in GVA (%)

Sectors	Old series 2004-05	New series 2011-12
Agriculture & Allied	17.9	18.4
Industry	27.2	33.1
Mining & quarrying	2.7	3.2
Manufacturing	14.7	18.1
Electricity	1.6	2.4
Construction	8.2	9.4
Services	54.8	48.6
Trade & Repair services	15.9	9.7
Hotels & restaurants	1.5	1.1
Transport, storage & com	7.3	6.5
Financial Services	5.7	5.9
Real Estate, public dwell	10.7	12.9
Public admin & defence	5.9	6.0
Other Services	7.8	6.5
Total GVA	100.0	100.0

Source: Rajakumar and Shetty (2015)

2.4.2 Data Quality of Corporate Returns

Experts caution that the financial returns filed by companies under MCA-21 may contain inaccuracies or inconsistencies. Without proper validation or cross-verification, using this data directly in national accounts can undermine the reliability of GDP estimates. According to the key findings of the Technical Report from the NSS 74th round survey, 16.4% of the companies registered with the MCA were either untraceable or had ceased operations, while 21.4% were found to be misclassified during field verification.



There are concerns about the proper classification of economic activities and their geographic locations within the MCA-21 database. This raises doubts about the accuracy of sector-wise and state-wise GDP figures, complicating regional economic planning.

2.4.3 Misclassification of Firms and Activities

Economist Rajeswari Sengupta has argued that the use of the Wholesale Price Index (WPI) as a deflator for the service sectors is flawed. The WPI does not capture service price changes accurately. Replacing it with sector-specific or double-deflation techniques could alter real GDP growth estimates substantially.

2.4.4 Informal Sector Estimates and the Demonetisation Puzzle

Another major critique is the treatment of the informal manufacturing sector. The assumption that its growth rate mirrors that of the formal sector is considered unrealistic. This likely led to an overestimation of growth and explains why the adverse effects of demonetisation were not captured adequately in official statistics. Research by G.C. Manna (NCAER) and others revealed large discrepancies between growth trends in the formal and informal sectors.

2.5 Conclusion: Moving Toward Better Measurement

The new GDP series incorporates methodological advances and broader data coverage, reflecting 'best available advice' at the time. However, it has led to a break in comparability with the previous series. The elevated growth rates in the new series could partly be due to methodology and not necessarily real economic acceleration.

While the new methods represent progress, issues regarding data quality, sectoral classification, and assumptions—especially for the informal sector—remain. It is evident that India is still transitioning toward full adoption of the international standards outlined in the System of National Accounts (SNA) 2008.

Going forward, a robust debate on statistical assumptions and regular improvements in data collection—especially in unorganised sectors—will be crucial. CSO must prioritise the validity, timeliness, and consistency of national statistics to ensure that future GDP revisions offer not only precision but also credibility. Transparent documentation and wider consultations with academic experts can strengthen the integrity of India's national accounts system.



Data Availability

There are no new data associated with this article.

Ethics Statement

This research met the ethical guidelines and legal requirements of the country in which it was performed.

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Conflict of Interest

Not applicable

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