



ELSEVIER

Contents lists available at ScienceDirect

Structural Change and Economic Dynamics

journal homepage: www.elsevier.com/locate/sced

Sectoral shares in Indian GDP: How to regard it?



Madhusudan Datta^{a,*}, Chiranjib Neogi^b, Abhrajit Sinha^c

^a University of Kalyani, West Bengal, India

^b ERU, ISI, Kolkata, West Bengal, India

^c Hoogly Mohsin College, Hoogly, West Bengal, India

ARTICLE INFO

Article history:

Available online 28 August 2015

JEL classification:

O11
O14
O57
C18

Keywords:

Accounting framework
Sectoral composition
factor cost
Constant-price estimates
Outlier

ABSTRACT

Some LDC'S provide their product estimates at producer's or market prices while others give it at factor cost making international comparison tricky. When input–output transactions tables are available and are given at factor cost, as in India, modifications based on such tables can give a rough approximation to market price estimates of sectoral shares. After such adjustments, making India's relative GDP shares comparable with those of other LDC's, and also controlling for China- influence, we have assessed the Indian sectoral structure in the context of the current international experience. We conclude that India's true performance is somewhat overshadowed by two factors—India's estimates for industry and manufacturing sectors showing a negative bias vis-à-vis its neighbors' and aberrations in Chinese data.

© 2015 Elsevier B.V. All rights reserved.

1. Introduction

The manufacturing sector of the Indian economy has been widely held to be an underperformer, defying the traditional idea contained in stylized facts summarized by Kuznets (1971) and Chenery and Taylor (1968) (henceforth, K-CT) regarding the evolving pattern of sectoral shares in GDP in the development process of an economy. The World Bank (2004) has described India's recent experience as service revolution (see also Rakshit, 2007). In more informal discussions the development is often viewed with some degree of reservation—the feeling is that services are fleeting while material goods last; so, growth with a stagnant share of the secondary sector in GDP is not solid growth. Even if one does not subscribe to this idea¹, it still

remains an interesting question from the point of view of structural changes—what is really the share of manufacturing or industry in Indian GDP or, how should we view alternative estimates in this regard? One of the basic objectives of the present study is to find an answer to this question.

The K-CT line of thinking would suggest that the trend of industry's share in India should have been rising and placed at a higher level than what it is now. Comparison with China makes the point particularly stark and this point has appeared time and again in the literature (Bosworth and Collins, 2007; Kochar et al., 2006). We raise here some pertinent questions regarding data and methodology in use, because underestimation in one case and overestimation in the other would make comparison very hazardous. Then, keeping these points in view, we proceed to evaluate India's standing with regard to levels and trends of relative shares of industry, manufacturing and services in

* Corresponding author. Tel.: +91 3325829249.

E-mail address: m1datta@hotmail.com (M. Datta).

¹ Manufacturing's share in GDP need not reflect, in fact it widely diverges from, the sector's share in aggregate expenditure or aggregate final uses of outputs. There is an extensive literature on the subject

(Baumol, 1967; Heston and Summers, 1992; Echevarria, 1997; Fagerberg, 2000; Triplett and Bosworth, 2003; Nordhaus, 2006; Datta, 2015).

the context of recent development experience of almost all countries above a minimum size (seventy-five thousand square kilometers).

In Section 2 of the paper we take a hard look at the Chinese data on sectoral shares in view of wide misconceptions that prevail and take a quick look at the Indian data with regard to its nature and appropriateness for comparison with other nations.

In Section 3 we present a brief discussion of the concepts underlying factor cost and market price estimates and point out how market price estimates of relative GDP shares of the manufacturing and industry sectors would be higher than that at factor cost. In this context Section IV presents an alternative procedure for estimation of relative shares based on input-output transactions tables available at hand. We have argued that this alternative estimate of industry's relative share may be taken as a rough approximation of that at market prices which is not provided by the CSO. Further, we have juxtaposed in this section estimates at factor cost given in the NAS and the alternative estimates drawn by us, for comparison. Section 5 discusses the nature of constant price estimates, which is often adopted by researchers for the study of changes in sectoral shares. Section 6 takes up an international comparison of the sectoral structure of the Indian economy after incorporating adjustments in the estimates of sectoral shares, as suggested in Sections 3 and 4 of the paper. The last section summarizes and concludes.

2. Nature and comparability of data

China is known to be struggling, particularly since 1993, to improve its services data which have been in a miserable state due basically to the country's mooring to the Material Products System (MPS) of erstwhile socialist countries. Now China has decidedly veered toward the System of National Accounts (SNA) and improved its data in line with SNA though much remains to be done still (Dongyou, 2009). There have been several revisions of data, each time reducing the industry share and raising the services share. One revision made in 2004 raised the GDP by 17%, and the services share from 31.9 to 40.4% mainly through revision of estimates for material services² (Xu, 2009), this upward revision means a corresponding decline in industry's share. China is in the process of developing a reliable mechanism (proper sample surveys) to account for (material) service activities like distributive trade and transport below a certain threshold which is quite high³. The relevant activities are probably inadequately accounted for separately. However, these activities are traditionally merged with the value generated in the material products sector of which industry sector constitutes the major part under the MPS.

² Material services under the MPS refer to such services as are incorporated in material goods at the point of their use. These are basically trade, transport and financial services used by industry up to the final delivery of its output to the user.

³ For wholesale trade the threshold is enterprises employing 20 or more workers or having annual sales of at least 20 million yuan. For retail trade it is 60 or more workers or annual sales of 5 million yuan (Xu, 2009, p. 453).

Thus, national product under the MPS, i.e., the Net Material Product (Datta, 1989; Beckerman, 1991) is not so much affected; but industry (and manufacturing) share tends to be overestimated, and services underestimated, vis-à-vis the SNA.

China published GDP data as a supplement to its MPS accounts up to 1993 when the country adopted the SNA as the accounting system. Due to conceptual moorings to the system of material product accounting many important service sector activities remained bound to material goods production and their separation was a tardy process. China's first economic census took place only in 2005 and then, for the sake of historical comparison, data have been revised several times. Despite all these efforts China is still some distance from full adoption of the SNA (Xu, 2009). We take up this brief discussion to put India-China comparison, or views on India's low industry-share, in proper perspective.

Indian national accounts, by comparison, have been much better integrated with the SNA, with a network of censuses and sample surveys in place. That things are not all rosy in spite of a long history and a sophisticated network is pointed out by none other than the National Statistical Commission citing frequent revisions (though revisions are not unknown even in developed countries). The Commission points out: "... Indian national accounts data are based on a mish-mash of income, production and expenditure methods as well as combinations of data referring both to the relevant year as well as extrapolations from past years. ... (estimation) often requires the use of certain norms, rates and ratios and other assumptions ... based on data from a remote past" (quoted from Srinivasan, 2003). The points made remain valid even now (CSO, Sources and Methods, 2012a,b). While the above criticism underlines the in-exactness of the data and a constant need to improve on it, it is in the nature of the subject and the approach is more or less resorted to by all countries under similar circumstances.

Apart from the annual National Accounts Statistics (NAS), the Central Statistics Office (CSO) of India has by now published nine (mostly) quinquennial input-output transactions tables (IOTTs). An IOTT involves much deeper and careful analysis of data taking several years after the first publication of NAS for the year concerned. Detailed and meticulous work to balance the flows both on the production and expenditure sides for each sector, keeping in view the compatibility between the NAS and the IOTT, makes each matrix a treasure of information notwithstanding the fact that quality of data is not beyond question.

Estimation of aggregate product in different countries is beset with a maze of procedural complications and this makes international comparison for less developed economies a bit tricky. International agencies like the UN, IMF, World Bank and the OECD have undertaken great efforts to standardize estimation procedures resulting in the System of National Accounts (SNA) being accepted in principle by almost all countries. Nevertheless, the statistical systems of different (particularly less developed) countries are not fully ready to implement the SNA in a uniform way. So, the degree of accuracy and also orientation of the accounts vary quite a great deal. Many less

Download English Version:

<https://daneshyari.com/en/article/988158>

Download Persian Version:

<https://daneshyari.com/article/988158>

[Daneshyari.com](https://daneshyari.com)