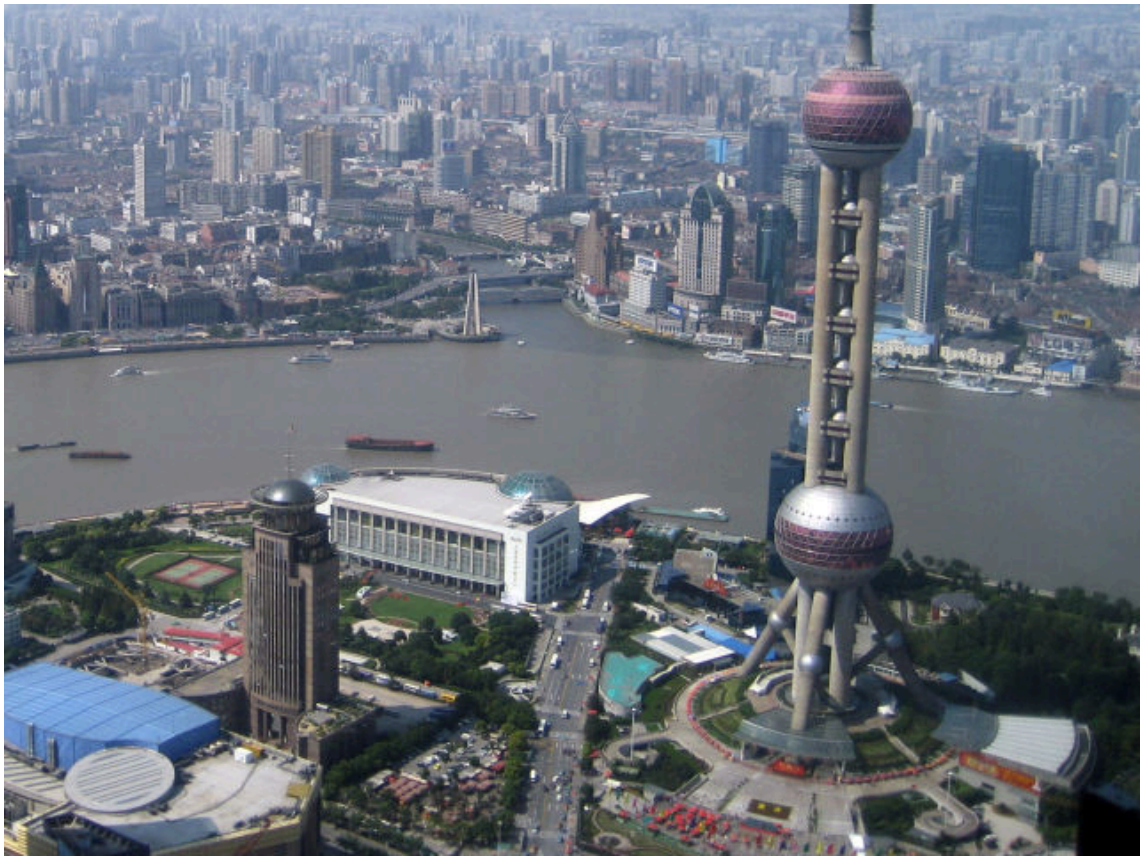
Analysis

Are Chinese GDP statistics reliable?

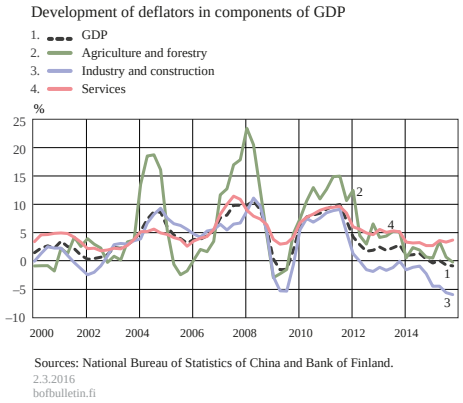
Chinese economy, Statistics | 13 April 2016

Despite increased economic and market uncertainty, China's GDP statistics still point to almost 7% growth, which is in line with official growth targets. According to the statistics, the deceleration of growth has been very smooth. This has once again raised suspicions over the reliability of Chinese GDP data. However, although there is much room for improvement in the coverage and transparency of the Chinese statistics, recent studies do not generally find evidence of significant or systematic falsification of GDP figures.



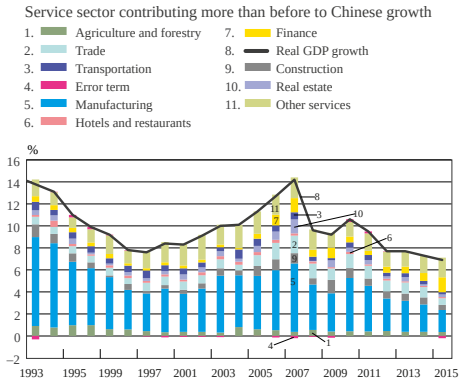
Debate on the accuracy of Chinese GDP figures has once again heated up. The slowing of nominal GDP growth below real growth has been seen as one indication of GDP performance in reality falling below the reported figure of around 7%. In recent years, nominal GDP growth has been much more volatile than real growth and has slowed much faster (Chart 1). The implicit GDP deflator turned negative in 2015, due mainly to increasingly sharp price declines in industry and construction (Chart 2).

Chart 1.



Sources: National Bureau of Statistics of China and Bank of Finland.
2.3.2016
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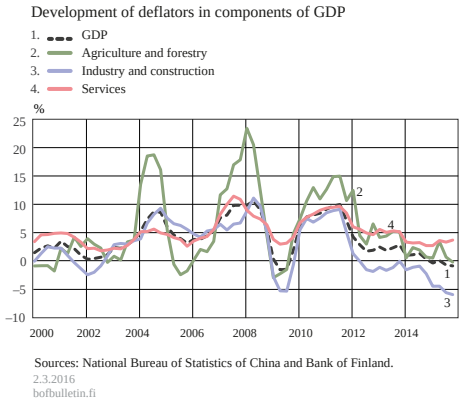
Chart 2.



Sources: National Bureau of Statistics of China and Bank of Finland.
2.3.2016
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There are several widely known shortcomings in Chinese GDP statistics. Overall, it is very difficult to reliably measure the size of an economy like China undergoing swift structural change. Revisions by the National Bureau of Statistics (NBS) to the composition of Chinese GDP have systematically adjusted the service sector upwards, but the statistics are still likely to understate the size of the service sector. According to one estimate, the service sector could be about 20% and total GDP 10% larger than shown by current statistics.[1] At present, service sectors in particular are sustaining China's brisk growth (Chart 3). In 2015, the financial sector made particularly rapid progress.[2]

Chart 3.



Sources: National Bureau of Statistics of China and Bank of Finland.
2.3.2016
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The GDP growth target is an important guideline in Chinese economic policy, and policy success is measured in terms of achieving the target. This erodes the credibility of the GDP statistics released by the National Bureau of Statistics. The Bureau does not publish any official GDP deflator. In applying slightly different weightings to price changes, the authorities can, at least in theory, influence the published real growth figure and make it better correspond to the growth target. A rather widely held view is that the official Chinese figures present a slightly smoothed version of reality.[3] On balance, however, recent studies do not provide evidence of systematic errors in official GDP figures compared with other macroeconomic indicators.[4] In the longer term, GDP is considered as representing a relatively reliable measure of economic activity in China.

Given that Chinese GDP statistics give rise to suspicions, several research institutes also use alternative indicators for monitoring China's economy.[5] These offer additional viewpoints for discussion but, considering their current scope of coverage, they do not suffice to replace GDP as a comprehensive indicator of macroeconomic activity. The biggest problem with regard to alternative indicators is that they are unable to account for the structural change in the Chinese economy. They mainly illustrate the evolution of heavy industry, construction and foreign trade, failing to adequately capture the growth of the service sector and private consumption.

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Notes

1. Rosen – Bao (2015). China uses the SNA 1993 statistical standard, which has a more limited coverage of, for example, the financial and real estate sector and R&D expenditure than the reformed standard. The statistical authorities have indicated their intention to adopt the more recent SNA 2008 standard, whereby the share of the service sector in the economy would expand and slower growth in industry would contribute less to overall GDP growth. ↑
2. In 2015, the financial sector grew by 16%. The financial sector's rapid enlargement is due, in part, to the stock market boom seen in 2015. With the normalisation of the financial sector's growth rate to a good 9% (the average of 2010–2014), the growth rate of headline GDP would decline by about 0.5 percentage point. ↑
3. See e.g. Nakamura – Steinsson – Liu (2014). ↑
4. See, among others, Holz (2014) and Mehrotra – Pääkkönen (2011). Angus Maddison and Harry Wu are perhaps the most well-known critics of China's official statistics. They have calculated an alternative GDP time series for China, in which average annual growth in 1992–2003 was 8.7% instead of the official 9.9% reported by NBS. See Maddison – Wu (2008). According to Fernald et al. (2015), Chinese GDP figures have become more reliable since 2008, compared with other indicators. ↑
5. The most well-known of the alternative indicators is perhaps the index named after the present prime minister, Li Keqiang, composed of electricity consumption, the railway cargo volume and bank lending. ↑

Keywords

BOFIT, China, gross domestic product, statistics