Available online at www.sciencedirect.com

ScienceDirect

Explorations in Economic History 55 (2015) 58 – 75

www.elsevier.com/locate/eeh

India and the great divergence: An Anglo-Indian comparison of GDP per capita, 1600–1871

Stephen Broadberry[a,*], Johann Custodis[b], Bishnupriya Gupta[b]

[a] London School of Economics, United Kingdom
[b] University of Warwick, United Kingdom

Received 18 November 2013
Available online 5 May 2014

Abstract

Estimates of Indian GDP are constructed from the output side for 1600–1871, and combined with population data. Indian per capita GDP declined steadily during the seventeenth and eighteenth centuries before stabilising during the nineteenth century. As British growth increased from the mid-seventeenth century, India fell increasingly behind. Whereas in 1600, Indian per capita GDP was over 60% of the British level, by 1871 it had fallen to less than 15%. These estimates place the origins of the Great Divergence firmly in the early modern period, but also suggest a relatively prosperous India at the height of the Mughal Empire. They also suggest a period of "strong" deindustrialisation during the first three decades of the nineteenth century, with a small decline of industrial output rather than just a declining share of industry in economic activity.
© 2014 Elsevier Inc. All rights reserved.

JEL classification: N10; N30; N35; O10; O57
Keywords: Indian GDP; Comparison; Britain

1. Introduction

Recently, there has been much progress in reconstructing the historical national accounts of a number of European countries during the early modern and even the late medieval periods (Broadberry et al., 2011, 2013; van Zanden and van Leeuwen, 2012; Malanima, 2011; Álvarez-Nogal and Prados de la Escosura, 2013). This paper applies similar methods to Asia, providing estimates of Indian GDP for the period before 1871. There is a strong need for estimates of Indian GDP during the early colonial period, to assess the strong revisionist claims about Indian economic performance made recently in the context of the Great Divergence debate. Parthasarathi (1998, 2011) has made the most striking claims for south India during the eighteenth century, arguing that living standards were just as high as in Britain, while Bayly (1983) has painted a picture of a thriving north Indian economy during the eighteenth century. Since the estimates of GDP are constructed from the output side, they also shed light on the extent to which India's colonial experience was characterised by de-industrialisation as

* Corresponding author at. Department of Economic History, London School of Economics, Houghton Street, London WC2A 2AE.
E-mail addresses: S.N.Broadberry@lse.ac.uk (S. Broadberry), J.Custodis@warwick.ac.uk (J. Custodis), B.Gupta@warwick.ac.uk (B. Gupta).

http://dx.doi.org/10.1016/j.eeh.2014.04.003
0014-4983/© 2014 Elsevier Inc. All rights reserved.

cotton textiles manufactured in Britain first displaced Indian exports in Britain before taking an increasing share of India's other export markets and ultimately the Indian home market.

This paper presents estimates of GDP for the pre-1871 period, and combines them with population data. We find that Indian per capita GDP declined steadily during the seventeenth and eighteenth centuries before stabilising during the nineteenth century. As British living standards increased from the mid-seventeenth century, India fell increasingly behind. Whereas in 1600, Indian per capita GDP was over 60% of the British level, by 1871 it had fallen to less than 15%. A number of conclusions follow. First, these estimates support the claims of Broadberry and Gupta (2006), based on wage and price data, that the Great Divergence had already begun during the early modern period. Second, they are also consistent with a relatively prosperous India at the height of the Mughal Empire, although much of this prosperity had disappeared by the eighteenth century. Projecting back from Maddison's (2010) estimates of GDP per capita for 1871 in 1990 international dollars, which are widely accepted as giving an accurate picture of living standards for the period after 1870, we arrive at a per capita income in 1600 of $682, well above the bare bones subsistence level of $400, or a little over a dollar a day. This is consistent with the recent revisionist work on Europe, which suggests that Maddison (2010) has substantially underestimated living standards in the pre-modern world (Broadberry et al., 2011). Third, the disaggregated results suggest that there was an absolute fall in Indian industrial production during the first three decades of the nineteenth century, rather than just a reduction in the share of industry in economic activity, although the scale of the fall was less than suggested by some nationalist authors (Bagchi, 1976).

The historical national accounting methodology adopted in this paper combines all the major data series currently available for India during this period and builds in a number of cross-checks to ensure consistency. The major data series include wages, grain prices, cloth prices, agricultural and industrial exports, crop yields and cultivated acreage, cloth consumption per capita, urbanisation rates, and government revenue. Agricultural output is estimated from both the demand and supply sides, using information on wages and prices to estimate domestic demand and exports for foreign demand, and cross-checked over the long run by estimating agricultural supply using data on the cultivated acreage and crop yields. Industrial production for the domestic market is initially estimated also from information on wage and prices, but it too is cross-checked against independent data on cloth consumption per capita from Roy (2012). These cross-checks verify the income elasticities of demand taken from the development literature, which suggests elasticities substantially below one. This means, in turn, that India's per capita GDP falls significantly less than real consumption wages. Finally, the projection of comparative India/GB GDP per capita back in time from 1871 is cross-checked against another benchmark estimate for 1600, which ensures consistency between growth rates and levels of GDP per capita.

The paper proceeds as follows. We begin in Section 2 with a brief survey of the existing literature on India's long run economic performance. This is followed in Section 3 by an application of the latest historical national accounting methods to India, describing the procedures for estimating output in agriculture, industry and services, before aggregating the sectoral outputs into real GDP for India during the period 1600–1871. In Section 4, these GDP estimates are then combined with data on population to derive estimates of Indian GDP per capita, and used to compare living standards in India and Britain. A new benchmark estimate of comparative GDP per capita in 1600 is also constructed, and used as a cross-check on the time series projections from the 1871 benchmark. Section 5 discusses the main results while Section 6 concludes.

2. India's long run economic performance

India's economic performance since the late sixteenth century has been the subject of enduring controversy. The travelogues of Europeans to India in the sixteenth and seventeenth centuries often described great wealth and opulence, but it is not difficult to see this as reflecting their contact with the ruling classes, who enjoyed a luxurious lifestyle with consumption of high quality food, clothing and ornaments, as well as imported luxury products. The middle class merchants and rich peasants that European travellers most frequently came into contact with also enjoyed a comfortable life-style. However, most travel accounts of Mughal India and the Deccan also noted that the majority of Indians lived in poverty (Chandra, 1982; Fukazawa, 1982). The labouring classes were seen as living in mud huts with thatched roofs, eating inferior grains, wearing rudimentary clothing and the use of footwear was relatively unknown (Moreland, 1923: 197–203). While cultural and climatic conditions may explain some of the consumption differences between India and Europe, most writers were in little doubt that the average Indian lived in poverty.

2.1. Trends in Indian living standards

There is a substantial literature which attempts to chart trends in Indian living standards over time, starting from

Download English Version:

https://daneshyari.com/en/article/5068783

Download Persian Version:

https://daneshyari.com/article/5068783

Daneshyari.com