

DISCUSSION PAPER SERIES

DP15431

**MEASURING COLONIAL EXTRACTION:
THE EAST INDIA COMPANY'S RULE
AND THE DRAIN OF WEALTH
(1757-1858)**

Pilar Nogues-Marco

ECONOMIC HISTORY



MEASURING COLONIAL EXTRACTION: THE EAST INDIA COMPANY'S RULE AND THE DRAIN OF WEALTH (1757-1858)

Pilar Nogues-Marco

Discussion Paper DP15431
Published 06 November 2020
Submitted 05 November 2020

Centre for Economic Policy Research
33 Great Sutton Street, London EC1V 0DX, UK
Tel: +44 (0)20 7183 8801
www.cepr.org

This Discussion Paper is issued under the auspices of the Centre's research programmes:

- Economic History

Any opinions expressed here are those of the author(s) and not those of the Centre for Economic Policy Research. Research disseminated by CEPR may include views on policy, but the Centre itself takes no institutional policy positions.

The Centre for Economic Policy Research was established in 1983 as an educational charity, to promote independent analysis and public discussion of open economies and the relations among them. It is pluralist and non-partisan, bringing economic research to bear on the analysis of medium- and long-run policy questions.

These Discussion Papers often represent preliminary or incomplete work, circulated to encourage discussion and comment. Citation and use of such a paper should take account of its provisional character.

Copyright: Pilar Nogues-Marco

MEASURING COLONIAL EXTRACTION: THE EAST INDIA COMPANY'S RULE AND THE DRAIN OF WEALTH (1757-1858)

Abstract

This paper revisits the relationship between capitalism and colonialism by examining the case of British India under East India Company rule (1757-1858). The Marxist-nationalist historiography claims that colonialism generated a steady drain of wealth and that this drain was responsible for Indian famines, poverty, inequality, and economic retardation. I use the East India Company budgets to measure the extent of the wealth that was drained through three direct channels: oppressive land taxes, unproductive expenditures on the imperial army and civil administration, and the unrequited export of commodities from India to Britain. I conclude that available figures lend empirical support to the Marxist interpretation. There was a drain of wealth, and its effect on the underdevelopment of former European colonies deserves further research.

JEL Classification: B14, F54, N45

Keywords: India, Colonialism, drain of wealth, East India Company, Marxism

Pilar Nogues-Marco - pilar.noguesmarco@unige.ch
University of Geneva and CEPR

Measuring Colonial Extraction: The East India Company's Rule and the Drain of Wealth (1757-1858)

Pilar NOGUES-MARCO ♦
University of Geneva and CEPR
pilar.noguesmarco@unige.ch

ABSTRACT

This paper revisits the relationship between capitalism and colonialism by examining the case of British India under East India Company rule (1757-1858). The Marxist-nationalist historiography claims that colonialism generated a steady drain of wealth *and* that this drain was responsible for Indian famines, poverty, inequality, and economic retardation. I use the East India Company budgets to measure the extent of the wealth that was drained through three direct channels: oppressive land taxes, unproductive expenditures on the imperial army and civil administration, and the unrequited export of commodities from India to Britain. I conclude that available figures lend empirical support to the Marxist interpretation. There was a drain of wealth, and its effect on the underdevelopment of former European colonies deserves further research.

KEYWORDS: India, colonialism, drain of wealth, East India Company, Marxism

♦ Paul Bairoch Institute of Economic History (University of Geneva) and Centre for Economic Policy Research. Email: pilar.noguesmarco@unige.ch. ORCID: <http://orcid.org/0000-0003-1164-519X>. Pilar Nogues-Marco is very grateful to the anonymous referees and the editors of *Capitalism: A Journal of History and Economics*, as well as members of The Paul Bairoch Institute of Economic History and participants in the Geneva History Seminar (November 2018), the Economic History Seminar at the University of Zaragoza (March 2019), CEPR Economic History Workshop (Odense, April 2019), the Economic History Seminar at the University of Barcelona (May 2019), EHES Conference (Paris, August 2019), SSHES (Berne, September 2019), and the Global Capitalism Conference (Graduate Institute-Geneva, October 2019) for useful comments and suggestions. The author declares no potential conflicts of interest with respect to this research. The author received no financial support for the research and publication of this article.

INTRODUCTION

This paper takes up a classic subject—the relationship between capitalism and colonialism—on the basis of fresh quantitative data regarding the case of British India under East India Company rule (1757-1858). The East India Company (EIC) began expanding its territorial and political hold on the Indian subcontinent at the Battle of Plassey in 1757, which led to its conquest of the Bengal *Subah* and control over Bengal's territorial revenues in 1765. After that, the East India Company expanded its territorial, political, and fiscal control across most of the subcontinent until the Indian Rebellion of 1857, when the British Crown, rather than the EIC, began to rule India directly (1858).

Indian colonialism under the East India Company's rule generated a steady flow of capital from India to Britain that contemporaries interpreted as a process of capital accumulation (on the British side) and a drain of wealth (from the Indian side). Karl Marx outlined his theory that the primary accumulation of capital through colonial despoliation was an essential prerequisite for the genesis of British industrial capitalism in a series of articles published in the *New-York Daily Tribune*, including “The East India Company: Its History and Results” (1853), “The British Rule in India” (1853), and “The Future Results of British Rule in India” (1853).¹

Espousing Marx's views, numerous Indian nationalist scholars, beginning with Dadabhai Naoroji, made the drain of wealth a major grievance against British colonialism. Naoroji, a Parsi intellectual, cotton trader, politician, and social leader, provided the first estimates of the drain of wealth and its relationship with starvation in India in speeches he gave at the East India Association, which he had helped found in London in order to raise awareness of the plight of India among the British public. Two such speeches, “England's Duties to India” (1867) and “Poverty of India” (1876), together with contributions later compiled in his *Poverty and Un-*

¹ Articles compiled in Husain (ed.), *Karl Marx on India*; and Marx and Engels, *On Colonialism*.

British Rule in India (1901), amount to the earliest and fullest articulation of the wealth drain theory. In 1867, the Indian National Congress officially adopted Naoroji's theory and in the 1940s Gandhi's independence movement against British rule drew considerable intellectual legitimacy from it.²

Politically active nationalist intellectuals, such as Mahadev Govind Ranade and Romesh Chunder Dutt, further developed Naoroji's theory and established the contours of the nationalist economic history whose influences are still felt today.³ After Indian independence in 1947, Marxist Indian scholars systematized this theory and identified three direct channels through which wealth was redirected toward Britain to India's detriment: oppressive land taxes weakened local agriculture, unproductive expenditures on the army and civil administration for imperial purposes deprived India of productive investments, and the systematic unrequited export of goods from India to Britain, i.e. Indian exports for which Britain "did not pay", amounted to an organized extraction of wealth.⁴ In short, the Marxist-nationalist approach holds the drain of wealth—which was caused by exploitative political relationships sustained by colonialism—responsible for Indian famines, poverty, inequality, and economic retardation.⁵

In 1963, Morris D. Morris challenged the Marxist-nationalist interpretation and suggested that Indian development was constrained by productive capacity, not by colonialism, because India in 1800 had none of the basic preconditions of an industrial revolution and sustained

² Naoroji and Parekh, *Essays, Speeches, Addresses*; Naoroji, *Poverty and Un-British Rule in India*; Naik, "Forerunners of Dadabhai Naoroji's Drain Theory"; Ghosh, *Gandhian Political Economy*.

³ Ranade, "Indian Political Economy"; Dutt, *Economic History of India*.

⁴ Sinha, *Economic History of Bengal*; Habib, "Colonialization of the Indian Economy"; Habib and Mitra, *Essays in Indian History*; Habib, "Studying a Colonial Economy"; Bagchi, *Political Economy of Underdevelopment*; Chandra, *Rise and Growth of Economic Nationalism in India*; Chandra, *Essays on Colonialism*; Mukherjee, "Return of the Colonial in Indian Economic History"; Tharoor, *Inglorious Empire*.

⁵ For historiographical overviews, see Roy, "Economic History and Modern India"; Roy, "Economic History"; Roy, "Rise and Fall of Indian Economic History"; Banerji, "White Man's Burden"; Parthasarathi, "History of Indian Economic History"; Mishra and Rastogi, "Colonial Deindustrialisation of India."

economic growth.⁶ Traditional India lacked political unity and stability and, therefore, no continuous administrative institutions and no persistent bureaucracy ever developed. Political instability also affected transport and market integration. Regional specialization and commercial activity did not develop. Indian agriculture had a very low level of productivity as a consequence of extremes of temperature, very short growing seasons, and limited soil moisture. The Indian textile industry also had low productivity, as it was supported by manual dexterity and not by sophisticated tools and manufacturing techniques. British rule established public order, provided security, implemented efficient administration, rationalized taxation and commercial regulations, and developed a system of transport that integrated the territory. According to Morris, all of these features probably stimulated economic activity.

Dharma Kumar followed Morris's approach in editing *The Cambridge Economic History of India, 1757-1970* (1983). Kumar rejected the sturdy Marxist-nationalist consensus, as she considered it to be out of date.⁷ The book describes the main macro-magnitudes and economic sectors: general economic trends and changes in regional agrarian structure, national income, population, occupational structure, industry, railways, irrigation, money and credit, foreign trade and balance of payments, the fiscal system, price movements, and fluctuations in economic activity. This approach was consistent with international (Western) economic historical approaches at that time, oriented as they were to the measurement of economic growth.⁸ The results seemed to support the revisionist position that Indian underdevelopment had endogenous causes and that British colonialism was a benign or not-so-relevant factor in Indian economic history.⁹ In response, Irfan Habib critiqued Kumar for studying the Indian colonial economy

⁶ Morris, "Towards a Reinterpretation."

⁷ Kumar, *Cambridge Economic History of India*, xii.

⁸ Sewell, "Strange Career."

⁹ Roy, "Economic History."

without perceiving colonialism, and for offering a speculative, incomplete, and tendentious interpretation of modern Indian economic history.¹⁰ According to him, mere impressions had been transformed into statistics, and assumptions had pre-determined conclusions. Similarly, Arun Banerji underscores that the manner in which Indian history has been written and is being rewritten by Western scholars erases colonialism.¹¹

More recently, Tirthankar Roy has proposed shifting from the Marxist-nationalist interpretation based on colonial power to a neoclassical interpretation of Indian underdevelopment.¹² He considers the drain of wealth a hard concept to define and an even harder one to measure. In his view, Marxist-nationalist economic historians of India have failed to persuade the present generation of mainstream neoclassical economists worldwide. Graduate students perceive Marxist-nationalist economic history as a “geriatric intellectual world” and economic history is not a saleable specialization in India these days. Roy proposes a new interpretation of Indian underdevelopment based on resource-endowments: India had in 1800, in 1900, and as late as the 1970s, a persistent excess of labor relative to land and capital. He highlights the relevance of private investment, which was unusually low in colonial India, for economic growth. Colonialism aided the integration of India into the nineteenth-century industrial-commercial revolution. Market transactions expanded during the colonial period, but diminishing returns to labor constrained growth. Roy proposes replacing narratives centered on colonial power with narratives that seriously consider long-term continuities in resource-endowments.

Contrarily, Parthasarathi claims that the decline of Marxism and the rise of neoclassical economics in India have eliminated Marxist history from contemporary Indian economics.

¹⁰ Habib, “Studying a Colonial Economy.”

¹¹ Banerji, “White Man's Burden.”

¹² Roy, “Economic History and Modern India.”; Roy, “Economic History.”

Against this tendency, he acknowledges the relevance of Marxist-nationalist interpretations of Indian retardation being anchored in colonial exploitation, and points to its potential contribution to reinvigorating economic historical inquiry.¹³

This paper contributes to the measurement of the drain of wealth under EIC rule (1757-1858). I focus on the period of the EIC rule because Marx was writing on Indian colonialism by the mid-nineteenth century, and his interpretation of the drain of wealth reflected EIC rule in India. That is, Marx was not making predictions, but mainly analyzing EIC rule, even though scholars have largely invoked his insights when studying the post-EIC period. EIC rule has received less attention from historians of Indian colonialism than the subsequent rule of the British Crown (1858-1947). This is in part because EIC rule is often conceived as a transitional period between the decline of the Mughal Empire and the rule of the British Crown, and in part because the lack of official statistics for the period of EIC rule is perceived as a period in which data are scarce for quantitative research.

Although official statistics compiled data starting in the 1840s, the EIC produced extensive accounting in response to regulatory reporting requirements that the British Parliament imposed on the EIC in the latter part of the 18th century. Analyzing these accounts—namely budgets—offers great advantages. On the one hand, the EIC compiled data together with valuable qualitative information that facilitates their interpretation. On the other hand, the systematic accounting provides both consolidated data and very detailed records that make it possible not only to measure, but also, and more importantly, to conceptualize the channels of the drain of wealth and the interrelationships among them.¹⁴

¹³ Parthasarathi, "The History of Indian Economic History," 290.

¹⁴ This research measures the legal channels for draining wealth, i.e. those legally recognized by the British Parliamentary regulations. Corruption was also a channel for draining wealth denounced by the Marxist-nationalist

This article is organized as follows. First, I explain the budgets and the regulations for EIC accounting in order to identify the channels of the drain of wealth approved by British Parliament and executed by the Company (section 1). Second, I measure the importance of each direct channel of the drain of wealth i.e. land taxation (section 2), unproductive expenditures (sections 3 and 4), and unrequited exports (section 5). Finally, I conclude by interpreting the significance of the drain of wealth for the Indian economy based on the data shown in this article.

1. Regulations and Primary Sources: East India Company Budgets

In 1757, the EIC defeated the ruling *nawab* of Bengal on the battlefield of Plassey, leading to the conquest of the Bengal *Subah*. In 1765, it assumed full control of Bengal's finances in exchange for paying an allowance to the *nawab* and his court. Bengal's territorial revenue was the EIC's starting point for expanding its territorial and political control across most of the Indian subcontinent.¹⁵ The subsequent evolution of the EIC as a taxing authority—and hence the information compiled in the EIC's budgets—was the result of the complex and evolving relationship between the EIC and the British Crown.

Between 1767 and 1784, the British Parliament made a series of interventions in the affairs of the EIC in exchange for financial relief.¹⁶ For instance, the Regulating Act of 1773 aimed to establish better management of the EIC, and an accompanying act set a ceiling on dividends and regulated the application of commercial profits and territorial revenues to reduce

scholars (see, for instance, Habib, “Studying a Colonial Economy,”). This research could not take corruption into account because it was not registered in the accounting that reflected only the legal drain of wealth.

¹⁵ Marshall, *Bengal—The British Bridgehead*.

¹⁶ Marshall, *Problems of Empire*, 31–51; Bowen, *Revenue and Reform*; Bowen, *Business of Empire*, 69–78; Stern, *Company-State*, 207–14.

EIC debt.¹⁷ In particular, with Pitt's India Act of 1784, the EIC was held accountable for its Indian territories. The 1784 Act established the Board of Commissioners for the Affairs of India (or "India Board"), which was responsible for managing the government's interest in British India. This arrangement prevailed until the rule of the British Crown replaced that of the Company in 1858.¹⁸ The India Board had control over the government and revenues of the EIC's territorial possessions in India and responsibility for examining its non-commercial accounts. On an annual basis, the EIC was required to submit a profit and loss statement based on trading activity and territorial revenues as well as a statement of its debts.¹⁹

The East India Company's charter was renewed in 1793 and 1813. The charter of 1793 extended the EIC's monopoly on trade for twenty years, although additional private trade was permitted.²⁰ The charter of 1813 abolished the EIC's commercial monopoly in India, so the EIC continued trading with India in competition with private traders.²¹ Both charters regulated the application of commercial profits and territorial revenues. Profits had to be used to reduce EIC debt and a ceiling on dividends was reiterated. After covering the collection costs, territorial revenues had to be used thus: first, to pay the army and the navy; second, to fund the interest on EIC debt to creditors in India; third, to pay civil and commercial establishments; fourth, to send goods from India and China to Britain; and fifth, to reimburse EIC debts to India. Additionally, the Charter Act of 1813 required the EIC to separate the accounts of its territorial branch from those of its commercial branch. The Court of Directors of the EIC was required to prepare a plan for arranging the accounts, which then had to be approved by the India Board. This gave rise to

¹⁷ Regulating Act, 1773, 13 Geo 3, c. 63, and 13 Geo 3, c. 64.

¹⁸ Foster, "India Board (1784–1858)"; The East India Company Act, 1784, 24 Geo 3, sess. 2, c. 25.

¹⁹ 24 Geo 3, sess. 2, c. 34.

²⁰ Charter Act, 1793, 33 Geo 3, c. 52.

²¹ East India Company Charter Act, 1813, 53 Geo 3, c.155.

much discussion.²² Consequently, the allocation of a given item did not necessarily reflect its fiscal or commercial nature. In the end, decisions about whether to put an item in the account of the territorial branch or that of the commercial branch were shaped by the negotiations between the EIC and the India Board. As a result, EIC commercial and territorial items on the balance sheet remained *de facto* intermingled (both for assets and for liabilities), which implies that the nature of the EIC debts (whether commercial or territorial) is obscure in the accounting.

In 1833, the Act to Regulate the Trade to China and India ended the EIC's monopoly on trade with China.²³ Additionally, although its commercial monopoly in India had already come to an end in 1813, it was not until 1833 that the EIC stopped trading with India. Therefore, from that moment on, the Company became solely concerned with the territorial government of India and no longer took part directly in the trading affairs of either India or China.

At the same time, the Saint Helena Act of 1833 established that the Indian territories would continue to be governed by the Company, in trust for the Crown of the United Kingdom.²⁴ The EIC maintained property in Indian territories for the service of the government. However, all debts owed by the Company were charged to the revenue of the Indian territories (that is, they were converted to Indian debt); therefore, neither the EIC's directors nor its proprietors were liable for any of its debts. The EIC was discharged from all claims to any profit except the dividend on its capital stock, payable with the revenue of the Indian territories and secured by Parliament until redemption after 1874. Dividends had to be paid out of Indian revenues in

²² In the India Office Records in the British Library, file L/AG/9/1/1 comprises the reports from the Committee of Accounts and copies of correspondence with the India Board on the new arrangements (November 1813 to September 1818) under the heading *Plan for keeping and arranging the Books of Account of the East India Company together with the Alterations, Amendments and Additions made by the Board of Commissioners*. The final result of negotiations between the EIC and the India Board is summarized in *A Statement of the Steps which have been taken by the Commissioners for the Affairs of India for carrying into effect the Separation of the Political and Commercial Accounts* (India Office Records, British Library, L/AG/11/1/2).

²³ Act to Regulate the Trade to China and India, 1833, 3 & 4 Will 4, c. 93.

²⁴ Saint Helena Act, 1833, 3 & 4 Will 4, c. 85.

preference to other charges, and Indian debt had to be reduced. The Company had to lay out before Parliament an account of its annual territorial revenue from India, separated by territory, presidency or settlement, and an account of its debts in each presidency or settlement, or in Britain.

The Government of India Act of 1853 renewed the East India Company's rule in India in trust for the Crown.²⁵ While the previous charter acts of 1793, 1813, and 1833 renewed the EIC's charter vicennially, this act did not indicate the time period for which it was being renewed. The Company's rule was to last only five more years, when it was abolished following the Indian Rebellion of 1857 and the Government of India Act of 1858 transferred the rule to the Crown.²⁶ The EIC's real and personal property was vested in the Crown for the purpose of governing India and its credit was transferred to the Indian Secretary, the British cabinet minister who assumed the combined authority of the Company and the India Board in 1858.²⁷ The Act preserved the EIC's rights to its dividends and, as before, dividends on its capital stock were paid out of revenues from India. Additionally, all the debts that the EIC had incurred before the Act were also paid out of revenues from India. Finally, the East India Stock Dividend Redemption Act of 1873 redeemed the EIC's capital stock against the credit account of the Indian Secretary, and, on January 1, 1874, the East India Company was dissolved.²⁸

As I have indicated, the regulations to which the British Parliament subjected the EIC required it to compile accounting returns and I have used these accounts to ascertain the size of the drain of wealth. The sources used were as follows: First, the collection "Accounts compiled for Parliament, the Treasury and Board of Control, 1788-1858" comprises the aggregated

²⁵ Government of India Act, 1853, 16 & 17 Vict, c. 95.

²⁶ Government of India Act, 1858, 21 & 22 Vict, c. 106.

²⁷ The formal title was "Indian secretary of state in council."

²⁸ East India Stock Dividend Redemption Act, 1873, 36 & 37 Vict, c. 17.

handwritten accounting, together with qualitative explanations of it.²⁹ Second, the collection “Budgets—accountant general records” includes the accounting printed for Parliament and internal documents intended to regulate accounting according to parliamentary directives.³⁰ These “budgets” also include the debt accounts that will be used in this article. The accounting logic remained stable over the long run, even though the itemization changed substantially, with granularity, in particular, increasing gradually.³¹

The accounting reflects the EIC’s three activities: taxation, trade, and finance. Firstly, the fiscal balances comprised the breakdown of revenues from, and expenses for, the Indian presidencies and territories.³² Secondly, until 1833, when the EIC ceased commercial activity, the trade accounts registered the EIC’s trade, i.e. commodities traded from Britain to the EIC’s territorial possessions³³ and commodities traded from India (Bengal, Madras, and Bombay) to Europe.³⁴ Some of the trading activities of the EIC, such as bullion flows, were never recorded in the budgets; and trade with China was not systematically recorded in these accounts. Finally,

²⁹ India Office Records, British Library, 1788-1858, L/AG/10/2/1-15.

³⁰ India Office Records, British Library, 1788-1858, L/AG/11/1/1-6.

³¹ The Budget of 1788 was forty pages long; the Budget of 1857 had expanded to ninety pages. Accounts were broken down by Indian presidencies and territories and kept in local currencies until 1854-1855. After 1855, the accounts were also aggregated for India and expressed directly in pounds sterling. Exchange rates between the pound and Indian currencies were the official rates defined by the India Board.

³² They also comprised revenues and expenses of Bencoolen (until 1824), Prince of Wales Island, and St. Helena (until 1833). In the Anglo-Dutch Treaty of 1824, the Dutch colony of Malacca was ceded to the British in exchange for Bencoolen. The whole of Singapore was purchased by the British that year. From that time on, Bencoolen stopped being registered in the accounting, whereas Malacca and Singapore began being registered together with Prince of Wales Island. Furthermore, in 1833, the Saint Helena Act transferred the control of the Island of Saint Helena from the EIC to the Crown. After that, Saint Helena was no longer registered in the accounting, while Prince of Wales Island, Singapore, and Malacca began being registered in the Bengal Presidency. India Office Records, British Library, 1788-1858, L/AG/11/1/1-6.

³³ That is, to India (Bengal, Madras, and Bombay), as well as to Bencoolen (until 1824) and Prince of Wales Island (including Singapore and Malacca after 1824). India Office Records, British Library, 1788-1858, L/AG/11/1/1-6.

³⁴ And from Bencoolen until 1824. Additionally, until 1813, the accounting also reported the amount of goods traded by the EIC to Britain, distinguishing the Company’s goods from private trade goods. India Office Records, British Library, 1788-1858, L/AG/11/1/1-6. According to the Charter Act of 1793 (33 Geo 3, c. 52), the EIC was in charge of shipping private trade in its vessels at the same freight as its own trade. However, after 1813 (Charter Act, 53 Geo 3, c. 155), private traders did not use the EIC’s ships, although ships engaged in private trade between the United Kingdom and Asia were required to have a license from the Court of Directors of the EIC, subject to the control of the India Board.

there was the management of debt. The EIC's debt accumulated both from its territorial deficits and from British trade deficits with India that had not been settled with bullion. The sections that follow will analyze EIC fiscal balances and debt dynamics in order to measure the drain of wealth.

2. EIC Fiscal Balances: Gross Revenues

In this section, I begin to compile the fiscal balances of the EIC. My goal here is to gauge the drain of wealth through the channel of taxation, particularly land taxation. That heavy taxation is an impediment to growth is not a basic tenet of the Marxist-nationalist historiography alone. Economic historians from a different tradition such as Acemoglu and Robinson (institutionalist approach) or Clingingsmith and Williamson (neoclassical approach) have admitted that extractive land taxation has a negative impact on agricultural productivity and development.³⁵ In the case of colonial India, two different positions exist in the literature. On the one hand, non-Marxist scholars recognize threads of continuity between the Mughal and the EIC rule because the latter inherited the precedent set by the Mughal tax system, which was based on agricultural production.³⁶ On the other hand, Marxist-nationalist historical scholarship stresses ruptures between these two governments based on the great increase in land taxation, which, they argue, became excessive under EIC rule.³⁷

The subject remains controversial, as measurement of the tax base is not homogeneous. Roy claims that before large-scale surveys began, measurement of agricultural production

³⁵ Acemoglu and Robinson, "Why is Africa Poor?". Williamson, *Trade and poverty*. Clingingsmith and Williamson, "Deindustrialization in 18th and 19th century India." 214: "*The lower the share of the output that peasants received, the less incentive they had to be productive*".

³⁶ Bayly, *Rulers, Townsmen, and Bazaars*; Bayly, *Indian Society*; Marshall, *Bengal—The British Bridgehead*; Richards, "Fiscal States in Mughal."

³⁷ For instance, Amiya Kumar Bagchi claims that the East India Company had nearly doubled revenue less than forty years from its establishment, but in fact, he is referring to total revenue, not just land revenue: See Bagchi, *Political Economy of Underdevelopment*, 79.

suffered from observation biases and a cavalier treatment of units of measurement.³⁸ Moreover, under the Mughal rule, tax collection was usually lower than official land tax because villagers underreported cultivated lands. Such “frauds” were brought to light when the EIC later developed new surveys.³⁹ Despite these limitations, it is useful to review quantitative evidence so as to give a rough comparison of land taxation under the Mughal and EIC rules respectively.

Mughal rulers before Akbar’s regime requested between one-fourth and one sixth of the land’s produce. Under Akbar (1556-1605), the bar was raised to about one-third of the harvest of food grains and one-fifth of valuable and saleable crops, such as indigo, tobacco, poppy, etc.⁴⁰ This rate applied to the provinces of “Hindustan”. Outside these provinces, Akbar demanded one-half of agricultural produce.⁴¹ During the reign of Shahjahan (1628-1658), the rate of one-half of the produce was adopted for cotton, barley, gram, and mustard seed, and one-third for wheat, rice, pulses, and rapeseed. In the same period, the peasants of Gujarat and Surat paid three-fourths of their crops as taxes. Later, Aurangzeb (1658-1707) ordered that land revenue should everywhere amount to half the produce.⁴² Therefore, quantitative evidence seems to show that during the Mughal rule taxation of the land production was both high and increasing.

Available evidence suggests that not only did the EIC keep land taxation high, but it also brought it to new heights in some territories. For instance, according to Peter Marshall, in the early 1790s, land revenue in Bengal and Orissa was 20 percent higher in real terms than it had been in 1757.⁴³ In 1795, the EIC’s assistant collector of revenues in India, Henry Thomas Colebrooke, calculated in his *Remarks on the present state of the husbandry and commerce of*

³⁸ Roy “Economic History of Early Modern India,” 1660-1661

³⁹ Briggs, *The Present Land-Tax*, 233

⁴⁰ Colebrooke, *Remarks on the Present State*, 40; Habib, *Agrarian System*, 191; Richards, *Mughal Empire*, 85–86; Richards, “Fiscal States in Mughal,” 413.

⁴¹ Habib, *Agrarian System*, 192–93; Moosvi, *Economy of the Mughal Empire*, 118.

⁴² Habib, *Agrarian System*, 193–95.

⁴³ Marshall, *Bengal—The British Bridgehead*, 144.

Bengal that in some districts, cultivators paid out more than half of their gross production and in others more than a fourth.⁴⁴ In Madras, the first land tax that the EIC imposed in 1765 was half of the land's gross production.⁴⁵ But in 1817 the Madras Revenue Board assessed the government's share of the production of land as being "in some districts as high as 60 or 70 per cent of the whole."⁴⁶ According to Dutt, land tax in Madras was too high, so in the 1820s the EIC had to gradually reduce it to one-third of the gross production. However, a more rigorous and systematic collection was applied simultaneously, so that in the end, total land revenues increased.⁴⁷

Focusing on the so-called "Ceded Territories and Conquered Provinces" (later known as the North-Western Provinces) whose acquisition had begun in 1801, Michael Mann reports a high increase in land taxation under the EIC.⁴⁸ The assessment (*jama*) of the first two years following acquisition (1801-1802) was the same as the previous *jama* performed by the *nawab* of Oude but after that, between 1803 and 1805, the EIC did raise land revenue rates. In the "Ceded Territories", they increased by 24 percent in comparison with 1801. In the "Conquered Provinces", they were higher in 1805-1808 by 75 percent compared to 1803-1804. For the Ceded and Conquered Provinces as a whole, land revenue rose by more than 50 percent between 1803-1804 and 1817-1818. Indeed, in 1844, the *Directions for settlement officers* of the North-Western provinces defined the assessment as being "two-thirds of what may be expected to be the net produce."⁴⁹

⁴⁴ See Colebrooke, *Remarks on the Present State*, 15. In 1793 in Bengal, the EIC fixed land revenues in perpetuity with the "Permanent Settlement" and the land tax did not increase afterwards.

⁴⁵ Dutt, *Economic History of India*, ix.

⁴⁶ Rickards, *India; or Facts Submitted*, vol. 1, 288. Dutt, *Economic History of India*, 221, reports a land tax of 60% of average produce in 1800.

⁴⁷ Dutt, *Economic History of India*, 231, 369

⁴⁸ Mann, "Permanent Settlement," 252.

⁴⁹ North-Western Provinces, *Directions for Settlement Officers*, Section III. 52, page 14

A land revenue amounting to half of total agricultural production can be considered as “extractive” in the Marxist meaning of exploitation by a small group of individuals of the rest of the population.⁵⁰ In European history, we have to go back to the Middle Ages to find land-tax rates similar to the ones that prevailed under the EIC. For instance, Michael Postan estimates that the average manorial payments of thirteenth-century English feudalism were very frequently near or above 50 percent of villein tenants’ gross output.⁵¹

The East India Company created various forms of private property for land with the purpose of securing/increasing the tax-paying capacity of India.⁵² According to Marxist-nationalist historians, colonialism transformed the agrarian structure in India and made the

⁵⁰ Acemoglu and Robinson, “Why is Africa Poor?” 27.

⁵¹ Postan, “Medieval Agrarian Society in its Prime,” 603.

⁵² Marx, “India,” *New-York Daily Tribune* (August 5 1853). Article compiled in Husain (ed.), *Karl Marx on India*, 43-45. The East India Company briefly summarized systems of land revenue under its rule in “Returns of the Gross Revenue derived annually from the Tax on Land in India since 1792,” ordered by the House of Commons to be printed, June 22, 1855. *UK Parliamentary Papers*. In Bengal, the system of land revenue was the *zamindari* system that comprised all those cases in which any portion of land was rated at a certain set sum and an individual called a *zamindar* engaged to pay that sum. The EIC declared the *zamindar*’s revenue commitment to the government to be fixed in perpetuity (the “Permanent Settlement” of 1793). Revenue-collection rights could be bought and sold as well as inherited. The *zamindar* had property rights on the land subject to the payment of the land taxes. In the North-Western provinces, the revenue system was the village system, i.e. each village was assessed at an aggregate sum and certain individuals, whose names had been entered in the government register, were held responsible for collecting that amount from the village’s proprietors. Usually, the more influential parties of the village community were allowed to choose the people whose duty it was to collect and pay the amount of the assessment to the officers of government. The revenue was fixed for a certain number of years, after which it could be revised (see also North-Western Provinces, *Directions for Settlement Officers*). A small portion of the Madras Presidency was under the *zamindari* system and the remainder under a *ryotwari* assessment. In the *ryotwari* system, land was assessed at a certain proportion of its gross produce, which had been commuted into a money payment based on average prices. The total amount of this commuted assessment was settled annually by the officers of government with each owner or occupier of land according to the extent of his holding. He received an annual lease (*pottah*), which specified the extent of his holding and the amount of the year’s tax payable by him. As long as the fixed tax was paid, every *ryot* was permanently secured in his holding and no rate of assessment higher than the original fixed tax per field could be imposed. In Bombay, the *ryotwari* system was chiefly used, but in a greatly modified form. Perfect freedom of cultivation and a moderate assessment was levied separately upon each field; leases were granted for a fixed amount of years at a fixed rent and were binding on the government for the full term, but with the option on the part of the cultivator of surrendering any one or more of his fields, or altogether putting an end to his lease at the close of any given year. But although the *ryotwari* system was prevalent, the village system also existed in the Bombay Presidency. Additionally, the *talookdarry* system, which was the village system extended to a district in the aggregate, also prevailed to some extent in Gujarat.

taxation system extremely regressive with the tax burden falling more heavily on the poor. This caused huge inequality, extreme poverty, and, ultimately, agricultural stagnation.⁵³

Data are scarce for the calculation of the material comfort of workers in the agricultural sector. To have a quantitative measurement, I have estimated the living standard of agricultural laborers in 1850 in Banda (Uttar Pradesh, N.W. Provinces). My results show that they lived below subsistence levels.⁵⁴ A similar diagnosis of the situation under EIC rule is also borne out by contemporaries. According to Capper's work, in the rural district of Cawnpore (N.W. Provinces) in the mid-nineteenth century, a cultivator earned £5 a year and had to pay a quarter of that for the land tax and another quarter for rent. This left him with only £2 10s for the costs of farming and supporting his family for a year. Capper claims that these were not extreme cases, but actually represented the conditions of a very large portion of the agricultural population of British India. In fact, my own calculations suggest that the living standard of agricultural laborers was very similar to the group of unskilled native workers referred to at that time as "coolies." The category included forms of unskilled manual labor, and constituted the worst paid category of laborers. They lived below bare-bones subsistence levels in the first half of the 19th century as

⁵³ Naoroji, *Poverty and Un-British Rule in India*, 58–61.

⁵⁴ According to my calculations, agricultural laborers were paid 2.5 *seers* of grain a day (first class), 2 *seers* of grain a day (second class, adults), or 1 *seer* of grain a day (third class, boys) in 1850 and 1871 in Banda (Uttar Pradesh, North-Western Provinces) (Atkinson, *Statistical Descriptive*, vol. 1, 119). Because 1 *seer* = 1/40 *maund* of weight and 1 *maund* = 82.268 avoirdupois pounds (Atkinson, *Statistical Descriptive*, vol. 1, 119), then 1 *seer* = 0.9329 kg. An adult male cultivator consumed 1 *seer* of grain a day, a woman consumed 75 percent of that, and a child 50 percent (Moosvi, *Economy of the Mughal Empire*, 342-343), which implies that they had to spend the whole wage for food grain, assuming some extra income from boys' wages. The total household consumption is estimated as 2.7987 kg of grain (one second class adult wage plus one boy's wage, or one first class adult wage), consistent with alternative estimations about subsistence grain consumption. According to Broadberry and Gupta, a household of six members (parents and four children) would have a subsistence consumption of 3.1 kg of rice ("Indian Economic Performance," 19). This is equivalent to the 2.56266 kg of rice for a household of 4.5 members that Moosvi used as a conventional family size in *The Economy of the Mughal Empire*, 343 (one adult male, one adult female, and 2.5 children).

they used nearly their entire wage to buy inferior food grains, leaving no margin for non-food expenditure.⁵⁵

This situation contrasts with the living standard of unskilled workers in 1595, at the end of the Akbar's reign, when they spent only 47% of their wages on the amount of food grains necessary to secure subsistence.⁵⁶ Therefore, at the end of the sixteenth century, unskilled workers could afford food in much greater quantity than in the nineteenth century. Admittedly, the end of Akbar's reign was the high point of economic well-being during the Mughal Empire.⁵⁷ Broadberry *et al.* have recently estimated that Indian per-capita GDP actually declined during the seventeenth and eighteenth centuries, before the takeover of India by the EIC. However, Mughal India remained well above bare bones subsistence.⁵⁸ It was only during EIC rule—in the early nineteenth century—that Indian per-capita incomes fell close to bare bones subsistence, precisely when levels of land taxation were kept high and even increased. A fiscal system based on heavy land taxes being the main source of revenue and applied to an impoverished population whose standard of living was, on average, close to bare bones subsistence, resulted in agricultural laborers and other types of unskilled workers living below poverty line.

The EIC budgets can help shed further light on these fundamental questions as they enable us to document tax pressure. Moreover, they serve to measure the relevance of land tax related to other sources of tax revenue for the EIC. The other main sources of revenue for the EIC were customs, salt, and the sale of opium. Customs comprised both internal and maritime

⁵⁵ The wage of agricultural laborers in mid-19th century, £2 10s a year, was equivalent to 400 *annas* (1 *anna*= 1/16 rupee), near the wage of the unskilled worker “coolie”. In 1815, these unskilled workers earned less than 1 *anna* a day in Meerut district (equivalent to nearly 1 seer of flour at that time). Their wage remained the same up until 1850, when it rose to 2 *annas* a day for a man and one *anna* for a boy in the North-Western Provinces (Atkinson, *Statistical Descriptive*, vol. III, part.2, 303). My estimate for food intake is from Moosvi (*Economy of the Mughal Empire*, 340–45).

⁵⁶ Moosvi, *Economy of the Mughal Empire*, 345.

⁵⁷ Broadberry, Custodis, and Gupta, “India and the Great Divergence,” 60

⁵⁸ Broadberry, Custodis, and Gupta, “India and the Great Divergence,” 69–70.

customs, the former still in force until the 1830s.⁵⁹ Salt was a state monopoly inherited from the Mughal.⁶⁰ The EIC famously introduced a profitable state monopoly on the production and sale of opium in India in the 1770s. Finally, there also existed a variety of small duties: post-office collections, stamp duties, mint duties, excise duties, etc.⁶¹

Table 1 shows the evolution of these various entries and their contribution to the EIC's taxation. I have followed the following decomposition:

$$\text{Gross revenues} = \text{Land revenue} + \text{Customs} + \text{Sale of salt} + \text{Sale of opium} + \text{Other revenue} \quad (1)$$

The Table underscore the importance of the land tax, but also its relative decline. It represented more than three-quarters of total revenue in 1787-1788 but half of total revenue in 1857-1858. Custom revenues remained stable, on average around 6 percent of total revenues.⁶² Salt revenue was stable too, averaging around 11 percent of total revenue. The most significant transformation in the tax base of the EIC was the rise in opium revenues, which increased from 4 percent of total revenue to nearly 20 percent between 1780s and 1850s.

⁵⁹ Banerjee, *History of Internal*; Richards, "Fiscal States in Mughal," 426.

⁶⁰ Colebrooke, *Remarks on the Present State*, laments the hardship of the salt tax for ordinary people; Richards, "Fiscal States in Mughal," 423

⁶¹ For instance, *Abkarry* was a tax on alcohol. *Sayer* refers to sundry taxes not included in miscellaneous revenues. *Moturpha* revenue (Presidency of Madras) was an income tax levied on artisans, shopkeepers, toolmakers, and so on (See Hendriks, "On the Statistics," 229, 237).

⁶² During that period, a reduction in inland customs was compensated by an increase in maritime customs due to the steady rise of India's seaborne trade.

TABLE 1. THE EAST INDIA COMPANY'S FISCAL BALANCES IN INDIA: REVENUES, 1788-1858
(selected years, quinquennial frequency), pounds sterling

Year	GROSS REVENUES								TOTAL NET REVENUE	PAYMENTS TO COLLECT REVENUE	INDIA REVENUE TO GDP RATIO (%)	UK REVENUE TO GDP RATIO (%)		
	Land Revenue		Customs		Sale of Salt		Sale of Opium						TOTAL GROSS REVENUE	
1787-1788	5,505,974	78%	330,293	5%	844,281	12%	289,927	4%	7,075,774	5,556,764	1,519,010	21%	1.93	9.52
1792-1793	6,553,597	78%	203,373	2%	1,101,779	13%	290,916	3%	8,401,927	6,833,506	1,568,421	19%	2.29	8.93
1797-1798	6,129,382	75%	211,259	3%	1,154,525	14%	238,044	3%	8,191,587	6,607,168	1,584,420	19%	2.24	9.03
1802-1803	10,776,663	78%	594,218	4%	1,446,775	11%	534,654	4%	13,771,026	11,386,993	2,384,033	17%	3.76	11.45
1807-1808	12,104,664	75%	852,623	5%	1,906,871	12%	802,739	5%	16,033,032	12,914,409	3,118,623	19%	4.32	14.55
1812-1813	12,628,970	76%	1,139,502	7%	1,674,664	10%	729,940	4%	16,686,329	13,262,908	3,423,421	21%	4.49	13.81
1817-1818	12,940,180	71%	1,625,514	9%	2,163,115	12%	873,598	5%	18,305,266	14,515,380	3,789,886	21%	5.28	11.52
1822-1823	14,968,765	68%	1,797,760	8%	2,889,201	13%	1,493,555	7%	21,908,269	16,784,803	5,123,465	23%	6.31	13.22
1827-1828	15,136,274	66%	1,751,246	8%	2,754,289	12%	2,051,773	9%	22,818,185	16,567,477	6,250,707	27%	6.33	10.73
1832-1833	11,086,787	61%	1,557,625	9%	2,078,308	12%	1,283,336	7%	18,066,503	13,955,042	4,111,461	23%	5.01	10.17
1837-1838	11,443,721	59%	1,374,610	7%	1,991,343	10%	2,138,610	11%	19,530,680	15,066,302	4,464,378	23%	6.92	8.80
1842-1843	12,813,304	60%	1,401,939	7%	2,521,943	12%	1,957,215	9%	21,190,259	16,419,931	4,770,327	23%	7.51	9.21
1847-1848	14,750,564	61%	1,293,607	5%	2,753,678	11%	2,564,184	11%	24,221,578	18,544,896	5,676,681	23%	8.43	8.27
1852-1853	14,728,025	55%	1,346,232	5%	2,495,782	9%	4,770,173	18%	26,816,508	20,947,426	5,869,082	22%	9.33	8.81
1857-1858	15,317,337	48%	2,148,834	7%	2,131,346	7%	6,864,209	22%	31,706,776	25,480,941	6,225,835	20%	7.66	8.28

Sources: Author's computations. India Office Records, British Library, L/AG/11/1/1 - L/AG/11/1/6, 1785-1857. Nominal India GDP calculated from Broadberry, Custodis, and Gupta, "India and the Great Divergence," tables 9, 12, and 15. GDP is given in ten-year frequencies and revenue data is quinquennial. I use the GDP closest to the revenue year to calculate the revenue-to-GDP ratio. The UK revenue-to-GDP ratio is from the Bank of England, "A millennium of macroeconomic data," version 3.1, March 2, 2017 (sheet A.27, column AX).

Another important feature of Table 1 is that the aggregate revenue of British India increased substantially during EIC rule. Total gross revenue in 1857-1858 in nominal value was four times what it had been in 1787-1788, an increase that was heterogeneous across presidencies.⁶³ To make sense of this increase, we should take into account that it may reflect the expansion of the EIC's geographical scope (more revenue because more territory) and/or an increase in fiscal pressure (more revenue because heavier taxation). The appropriate tool to achieve this is the nominal GDP, which reflects the size of the economy, and is available from Broadberry *et al.*⁶⁴ One problem with using GDP as a benchmark is that available estimates rely on a territorial definition of "India" that is fixed over time, while the territory under EIC rule expanded.⁶⁵ Therefore, the ratio can be calculated only at the end of the period, when the expansion of British India had been almost completed. The ratio of tax revenue-to-GDP was on average 8.5 percent in the 1850s. This shows that Indian "fiscal capacity" was very high by international standards at this point. In fact, it was comparable to the fiscal capacity of the UK, which was also 8.5 percent in the 1850s (see Table 1).

In Western European history, fiscal capacity has been associated with economic performance. The higher the power of states to extract revenues, the better it was for economic growth in the long run.⁶⁶ Britain is considered to be the exceptionally successful fiscal state in European history. The state not only provided external security, internal stability, and sustained

⁶³ Gross revenues trebled in Bengal, they were multiplied by about five in the North-Western provinces, and Madras Presidency, and they increased thirty-fold in Bombay

⁶⁴ Broadberry, Custodis, and Gupta, "India and the Great Divergence,"

⁶⁵ GDP estimates "are for the territory of the Indian sub-continent, including Pakistan and Bangladesh as well as modern India, for the whole period 1600-1871". Broadberry, Custodis, and Gupta, "India and the Great Divergence," 61. The East India Company's territorial control in India comprised an area of 378,000 square kilometers and 30 million inhabitants in 1765. By 1859, that area had expanded as a consequence of successful war and aggressive diplomacy to a territory of 2.5 million square kilometers and 145 million inhabitants under direct British rule. Additionally, the so-called "princely states," i.e., protectorates ruled by dependent Indian rulers, comprised another 1.5 million square kilometers and 48 million inhabitants. Richards, "Fiscal States in Mughal," 419-20. See Banerjee and Iyer, "History, Institutions, and Economic Performance," appendix 1, for a detailed description of the territorial expansion of British India.

⁶⁶ Dincecco, *State Capacity*.

protection for property rights, but above all it funded an effective mercantilist strategy that fostered commercial gains garnered from servicing an expanding global economy.⁶⁷ India, on the contrary, did not achieve economic growth in the long run despite the fact that EIC rule had increased its fiscal capacity to a similar ratio of revenue-to-GDP as that of the United Kingdom.⁶⁸ The expanding global economy associated with colonialism generated different outcomes for European empires and colonized territories. Colonialism's drain of wealth can be considered a plausible explanatory factor in the differing outcomes as India's real output stagnated during EIC rule.⁶⁹

3. EIC Fiscal Balances: Net Revenues

The Marxist-nationalist historical scholarship denounces the regressive character of taxation under EIC rule. Poor peasants paid confiscatory land taxes to landlord tax collectors, who received high rents for collecting taxes. Landowners collected taxes in exchange for property, but they failed to invest in land and charged excessive rent in *zamindari* areas, while peasant proprietors fell into debt to exploitative lenders and lost control over their lands in *ryotwari* areas. The landlords took no interest in agriculture beyond collecting rent. Instead, they found charging excessive rent and interest far more profitable, safe, and congenial than making productive investments in land. The moneylenders and merchants used their increasing share of agricultural surplus to raise interest rates or to take property of land, with the objective of becoming landlords themselves. The vast majority of small land-owning peasants, tenants, and

⁶⁷ O'Brien, "Nature and Historical Evolution," 439; O'Brien, "Costs and Benefits of Mercantilist Warfare," 105, 108.

⁶⁸ See Table 1. The revenue-to-GDP ratio was similar in the UK and India in the period 1840s-1850s. Before this period, the ratio of revenue-to-GDP underestimates Indian fiscal capacity because revenue refers to revenue only for the territories under EIC rule and GDP refers to GDP for all of India.

⁶⁹ Indian real output in Broadberry, Custodis, and Gupta, "India and the Great Divergence," 69.

sharecroppers had no resources to invest in the improvement of agriculture. Furthermore, the savings of small peasant landowners were usually consumed by famine, scarcity, and economic depression. Throughout the eighteenth and nineteenth centuries, high land taxation eroded the peasants' surplus. The central point for the Marxist-nationalist argument is that the agricultural surplus went into the wrong hands. They contend that resources were siphoned off from agriculture without any return, thereby subjecting agriculture to an internal drain of wealth.⁷⁰

I calculate payments to collect revenue according to the budgets produced by the EIC.

Payments to collect revenue were deducted from gross revenue:

Net revenues = Gross revenues – Payments to tax collectors and allowances to local rulers⁷¹ (2)

Table 1 shows the cost of revenue collection, which amounted on average to 21 percent and was fairly constant from 1787-1788 to 1857-1858. Allowances and assignments to local rulers that had been established in treaties played a significant role in the EIC's diplomatic strategy of territorial expansion. Allowances, pensions, and stipends to local rulers, dependents, adherents, and district and village officers—along with salaries for tax collectors and local, deputy, and financial commissioners—sustained the tax collection that permitted the EIC to expand its territorial and political control across most of the Indian subcontinent.⁷²

Payments to collect revenues were indeed less expensive during EIC rule than under the Mughal tax system. The normal cost of tax collection in Northern India in Akbar's later years

⁷⁰ Marx, *Capital*, 155; Chandra, "Reinterpretation of Nineteenth Century," 51; Habib and Mitra, *Essays in Indian History*, 278, 302; Chandra, *Essays on Colonialism*, 88–89, 188.

⁷¹ Payments for tax collection and allowances to local rulers were comprised of: (1) Collection charges for local commissioners, deputy commissioners, financial commissioners, collectors of revenue, salaries, establishments, and contingent charges, as well as advances and charges of salt and opium; (2) Allowances and assignments in accordance with treaties and other engagements, i.e. allowances to local rulers (*rajah*, *nawab*), their descendants, dependents and adherents, allowances to chiefs and their families and dependents, territorial pensions and political pensions to the families and dependents of local rulers, stipends to local rulers; (3) Allowances to district and village officers, i.e. payments at the several collectorates in lieu of resumed lands and privileges, allowances to *zamindars*, *muzmoodars*, *dessaes*, and other district and village officers and *enamdars*.

⁷² Bayly, *Indian Society*, 111.

(near the end of the sixteenth century) was around 37 percent (which included the *zamindars*'s share of 10 percent, 7 percent for local officials, and 20 percent for the revenue-collector for assessment and collection), which is nearly double the cost of tax collection under the EIC.⁷³ The EIC rationalized tax collection by eliminating intermediaries and developing an official bureaucracy to collect taxes directly.⁷⁴ Between 1757 and 1857, the EIC eliminated three-quarters of the warlord aristocracy (all except those in princely states) and more than half of the local chieftainry and established a bureaucracy in their place.⁷⁵ However, as we will see in the next section, the EIC had a very expensive colonial service. Therefore, the rationalization of tax collection did not imply a cost reduction, but rather a transfer of exploitation from traditional local elites to British colonial officers. According to Maddison and Bagchi, at least the native ruling class had engaged in domestic consumption of luxuries such as fine muslins, footwear, and other high-end craft products: jewelry, decorative swords, etc. which represented about 5 percent of Mughal national income. But the British colonial administration repatriated gains to London and wore only European clothes and shoes. European tastes were adopted by the new Indian "middle class", which destroyed the domestic demand for luxury handicrafts and amplified the negative effects of the drain of wealth.⁷⁶

⁷³ Moosvi, *Economy of the Mughal Empire*, 131.

⁷⁴ Stokes, "First Century," 144.

⁷⁵ Maddison, *Class Structure and Economic Growth*, 54–55.

⁷⁶ Maddison, *Class Structure and Economic Growth*, 55; Bagchi, *Political Economy of Underdevelopment*, 25–28.

4. EIC Fiscal Balances: Expenses

Marxist-nationalist historians have linked taxation with non-productive expenditure disconnected from the true needs of the people and the development of the Indian economy.⁷⁷ Therefore, to approach the relationship between fiscal capacity and economic growth, I consider not only “extractive capacity” (i.e. the capacity of the state to extract revenues), but also “productive capacity” (i.e. the capacity of the state to play a productive economic role through adequate policies and the provision of public goods that promote growth).⁷⁸

I compile fiscal expenses according to EIC budgets. Net revenues were used to pay charges in India and Britain:

$$\text{Fiscal Balance} = \text{Net revenue} - \text{Charges in India} - \text{Charges in England} \quad (3)$$

The state’s “productive capacity” is usually measured by non-military state expenditures.⁷⁹ Marxist-nationalist historians consider the British imperial pattern of expenditure almost wholly non-productive because high social surplus extracted from the people was channeled to an army and civil administration that did not serve India’s needs. These expenses represented a diversion of India’s revenue for British imperial purposes. As a result, very little was spent on the development of agriculture and industry, on social infrastructure, or on nation-building activities.⁸⁰

To measure the state’s “productive capacity,” Table 2 shows aggregated expenses for British India under EIC rule. They are grouped into several categories according to the primary source’s classifications: (a) civil and political, (b) judicial and police, (c) interest on debt, (d) military (including military buildings), (e) marine, (f) buildings and fortifications (including

⁷⁷ Naoroji, *Poverty and Un-British Rule in India*, 314; Chandra, *Essays on Colonialism*, 188

⁷⁸ Besley and Persson, “Taxation and Development”; Dincecco and Katz, “State Capacity.”

⁷⁹ Dincecco and Katz, “State Capacity,” 197.

⁸⁰ Naoroji, *Poverty and Un-British Rule in India*; Ganguli, “Dadabhai Naoroji,” 85–86; Chandra, *The Rise and Growth of Economic*, 652–53; Chandra, *Essays on Colonialism*, 84.

roads and other public works, but not repairs that are included in civil expenses), and (g) charges in England.⁸¹

Firstly, the EIC built up a massive regular army.⁸² By far the greatest single expense category was the military, which amounted on average to nearly 70 percent of total expenses (see Table 2). John Wilson, a member of the Royal Asiatic Society, highlighted that “our wars in India have not cost our nation a single farthing, but have been defrayed from the revenues or credit of that country itself. The numerous European officers and agents employed in these wars and conquests were English. All were well paid, and many of them by salaries and other means acquired princely fortunes.”⁸³ By 1851, the army totaled 289,529 men, of whom 17 percent, or 49,408 men, were British company or Royal troops.⁸⁴

⁸¹ Charges in England were the net supplies from the territorial branch to London. The most relevant items were: dividends to proprietors of East India Stock, value of stocks consigned to India, interest on the home bond debt, payment to military and marine officers, pensions for civil, military, and maritime officers, payment to British troops serving in India, and so on. From the accounting year 1834-1835 onwards, dividends to proprietors of East India Stock were computed to charges in England (3 & 4 Will 4, c. 85), as we have seen in section 1. Until the early 1830s, charges in England were included in charges in India (civil department). From 1830, charges in England were separated from charges in India and registered in the independent account named “A statement of the charges defrayed in England on account of the Indian Territory” and paid upon the fiscal balance. In 1854-1855, when accounts were consolidated for India, net supplies to London were transferred directly to the fiscal balance account under the heading “Charges in England.”

⁸² Roy, “Rethinking the Origins.”

⁸³ Reproduced in Allen, *India, Ancient and Modern*, 295.

⁸⁴ Richards, “Fiscal States in Mughal,” 427.

TABLE 2. THE EAST INDIA COMPANY'S FISCAL BALANCES IN INDIA: EXPENSES, 1788-1858
(selected years, quinquennial frequency), pounds sterling

Year	Charges in England		Civil and Political		Interest on debt		Judicial and Police		Military		Marine		Buildings and Fortifications		TOTAL	SURPLUS = NET REVENUES -EXPENSES
1787-1788			639,667		15%	3,146,357	74%	142,980	3%	95,436	2%	4,225,459	1,331,305			
1792-1793			813,391		18%	3,490,440	76%	130,179	3%	84,187	2%	4,621,840	2,211,667			
1797-1798			1,114,146		19%	4,613,149	77%	120,831	2%	102,660	2%	5,972,777	634,391			
1802-1803			1,515,018		17%	6,571,147	73%	192,856	2%	186,809	2%	9,003,841	2,383,152			
1807-1808			2,547,953		23%	7,635,018	70%	246,156	2%	347,447	3%	10,905,300	2,009,109			
1812-1813			2,732,171		26%	7,204,616	69%	205,134	2%	248,841	2%	10,438,841	2,824,067			
1817-1818			1,382,102	11%	986,032	8%	9,279,598	77%	249,479	2%	157,868	1%	12,055,078	2,460,301		
1822-1823			1,636,751	14%	869,480	7%	8,533,781	72%	227,504	2%	635,107	5%	11,902,623	4,882,181		
1827-1828			2,164,896	14%	1,121,313	7%	10,433,629	67%	349,389	2%	773,455	5%	15,527,724	1,039,753		
1832-1833	1,227,536	9%	1,555,073	12%	1,718,293	13%	1,633,186	13%	7,254,934	56%	306,289	2%	157,297	1%	14,123,821	-168,779
1837-1838	2,304,445	16%	1,777,571	12%	1,365,382	10%	1,668,222	12%	6,725,937	47%	247,992	2%	57,125	0%	14,285,984	780,318
1842-1843	2,458,193	14%	1,941,200	13%	1,627,246	11%	1,653,646	11%	8,347,256	55%	311,217	2%	134,304	1%	17,765,257	-1,345,326
1847-1848	3,016,072	15%	1,951,836	12%	1,979,077	12%	1,772,912	11%	8,825,810	54%	364,590	2%	162,551	1%	19,488,893	-943,997
1852-1853	2,697,488	13%	2,082,225	10%	2,346,801	11%	2,083,887	10%	9,658,754	46%	370,016	2%	344,116	2%	20,938,024	9,402
1857-1858	4,492,470	13%	4,019,886	12%	2,196,672	7%	2,635,133	8%	15,962,708	48%	1,200,544	4%	2,660,485	8%	33,345,163	-7,864,222

Sources: Author's computations. India Office Records, British Library, L/AG/11/1/1 - L/AG/11/1/6, 1785-1857.

Secondly, civil and political expenses in India represented more than 10 percent of the total before 1833. After the Charter Act of 1833, charges in England increased substantially. They represented a large and increasing proportion of expenditure. From the 1830s to the 1850s, civil and political expenses in India plus charges in England amounted to more than 20 percent of total expenses (see Table 2). The EIC had an expensive colonial service. High salaries were supposed to ensure integrity and put an end to the corruption of the first two decades after the battle of Plassey.⁸⁵ The Viceroy (the highest rank of civil servants in India) received a salary equivalent to more than 3,500 times the average income of an Indian laborer while a governor's salary was nearly 1,500 times greater.⁸⁶ According to Marx, pensions and allowances for British officials in the Indian government, plus the cost of the secretary of state's establishment at the India Office, completed the drain of wealth caused by imperialism.⁸⁷

Finally, interest on East India Company debt represented, on average, more than 10 percent of total expenses (see Table 2). We have seen in section 1 that debt comprised both territorial and commercial debt, but interest was charged exclusively on territorial revenue. The interest on commercial debt paid with Indian revenue is also considered a drain of wealth by the Marxist-nationalist historical scholarship.

The remaining expenses were marine, judicial, police expenses and buildings, fortifications, roads, and other public works. Marine expenses amounted to 2 percent of total expenses and comprised collections from inward and outward pilotage and the costs of moorings, lighthouses, duties, and so on. Judicial and police expenses represented more than 10 percent of total expenses. The judiciary and police were intended to maintain law and order as well as

⁸⁵ Richards, "Fiscal States in Mughal," 428; Mann, "From Ledger to Budget."

⁸⁶ Maddison, *Class Structure and Economic Growth*, 63.

⁸⁷ Marx, "British Incomes in India," *New-York Daily Tribune* (September 21, 1857). Article compiled in Husain (ed.), *Karl Marx on India*, 97-100.

enforce tax collection. Finally, public works amounted, on average, to 3 percent of total expenses and were related to non-military EIC buildings, fortifications, and other infrastructure built for the use of the Company (see Table 2).⁸⁸

The government did not invest in improving agriculture. The land tax was not used for the benefit of the Indian population. Instead, it was channeled into continuous tribute to Britain.⁸⁹ Marx stressed that no taxes were returned to the Indian people in the form of public works, through irrigation infrastructure, such as canals and waterworks and “that nowhere was a provision so extravagant made for the governing class itself.”⁹⁰ He argued that in Asia there had historically been three departments of government: finance, wars, and public works. Irrigation had constituted the basis of Asian agriculture because of climate conditions. However, EIC rule in India entirely neglected the public works department, hence agriculture deteriorated. Indeed, at the time, Marx wrote, “Irrigation, *sine qua non* of farming in the East, might be greatly extended, and the frequently recurring local famines, arising from the want of water, would be averted.”⁹¹

The EIC failed to repair and maintain roads, river embankments, and village tanks and watercourses for irrigation that had been the responsibility of the state under earlier regimes.⁹² Colebrooke recognized that “reservoirs, water-courses, and dykes were more generally in a process of decay than of improvement.”⁹³ Canals—such as the Delhi Canal and the canal west of

⁸⁸ The heading “Buildings, fortifications, roads and other public works” included EIC commercial infrastructure, buildings, roads, irrigation canals, tanks, embankments, works of irrigation, anicuts, dams, bridges, and, in the later period, electric telegraphs and purchases of land for railway purposes.

⁸⁹ Dutt, *Economic History of India*, 408.

⁹⁰ Marx, “The British Rule in India,” *New-York Daily Tribune* (June 10, 1853); Marx, “Taxation in India,” *New York Daily Tribune* (July 23, 1858). Article compiled in Husain (ed.), *Karl Marx on India*, 183-187.

⁹¹ Marx, “The British Rule in India,” *New-York Daily Tribune* (June 10, 1853); Marx, “The Future Results of British Rule in India,” *New-York Daily Tribune* (July 22, 1853). Articles compiled in Husain (ed.), *Karl Marx on India*, 11-17 and 46-51. Bagchi, *Political Economy of Underdevelopment*.

⁹² Richards, “Fiscal States in Mughal,” 429.

⁹³ Colebrooke, *Remarks on the Present State*, 25.

the Jumna River in the north and the ancient system of anicuts and weirs in the Cauvery delta—were falling into neglect by the early nineteenth century.⁹⁴ Irrigation infrastructure deteriorated because the directors of the EIC decided against investing in public works. When the directors of the EIC learned of heavy expenditures on buildings in the mid-1820s, they wrote to the governor general to “condemn this extravagance.”⁹⁵ Great restrictions were placed on financing irrigation infrastructure, and the EIC government limited its expenditure to the estimated returns irrigation would bring by enabling the cultivation of new areas, thus increasing land revenue. It was not until late in the EIC’s rule that improvement in irrigation works began to take place. Canals, such as the West and East Jumna canals, were restored in the 1830s, and the Ganges Canal in the North-Western Provinces and the Godavari scheme in Madras were completed in the 1840s and 1850s.⁹⁶

The Marxist-nationalist historical scholarship links the deterioration of irrigation infrastructure to the intensity of famines. Famines reoccurred in India during EIC rule without leading to any change in EIC’s policy of land revenue extraction. Following the Bengal famine of 1769-1770, which claimed the lives of 30 percent of the population of Bengal (10 million inhabitants), the EIC’s pursuit of land revenue had continued unabated. Famine continued to strike. For instance, the *Doji bara* famine of 1791-1792 caused mortality estimated at around 11 million inhabitants in Madras Presidency; the Agra famine of 1837-1838 caused around 800,000 deaths; and 5 million inhabitants (out of 8.5 million) were seriously stricken in the N.W. Provinces.⁹⁷

⁹⁴ Whitcombe, “Irrigation,” 678.

⁹⁵ Richards, “Fiscal States in Mughal,” 429.

⁹⁶ Marriott, Mukhopādhyāya and Chatterjee, *Britain in India*.

⁹⁷ Ghosh, *Famines in Bengal*, appendix; Mahalanobis and Bhattacharya, “Growth and Population”; Visaria and Visaria, “Population,” appendix 5.2; Reddy, *Indian History*, c. 80; Grove, “The Great El Niño of 1789–93”.

When famines happened, a policy of non-intervention was generally implemented and revenue authorities paid little attention to the need for tax remission. Some work-relief agencies were opened, but financial orthodoxy stood in the way of extensive relief efforts. Instead, troops were deployed to restore order. In fact, following the end of the rule of the EIC, British government officials soon connected famine to insufficient investment in irrigation systems. Atkinson, for example, recommended taking drought prevention and mitigation measures, such as building more canals.⁹⁸

In fact, a crucial difference between the Mughal and EIC rule was the response of land-tax collection in times of crisis. According to Dutt, the Mughal rulers never fully realized the taxes they claimed and their collection was dependent on economic conditions.⁹⁹ Bayly suggests that the Mughal revenue system was flexible in times of crisis.¹⁰⁰ Mughal tax collection depended on the harvest, adaptable systems of credit and revenue remissions, and the mutual cooperation of a host of rural intermediaries, revenue farmers, and moneylenders. Kali Charan Ghosh highlights the role of remissions or postponements of payment of land taxes that the Mughal rulers extended in times of famine.¹⁰¹ Similarly, Kumar writes that the Mughal state tried to counteract the effects of famine with loans and the distribution of grain from public

⁹⁸ Atkinson, *Statistical Descriptive*, vol. II, part 1, 40. Atkinson considered the increase in irrigated land proof of the effectiveness of canals. For instance, in the Ganges Canal in the Meerut Division of the North-Western provinces, the acreage that received water in the year 1868-1869 was double that of 1861, whilst the land area irrigated in 1861 was itself more than four times that of 1837-1838, a year of famine. Whitcombe, "Irrigation", 689 also recognizes the protective value of irrigation in a condition of famine.

⁹⁹ Dutt, *Economic History of India*, ix.

¹⁰⁰ Bayly, *Indian Society*, 89-90.

¹⁰¹ Ghosh, *Famines in Bengal*, 1. Ghosh explains that the Mughal emperor Shahjehan (1627-1658) provided relief for the famished, distributed food and money, and remitted all taxes for two years during the famine in Bombay Presidency in 1629-1630. The Mughal emperor Aurangzeb (1658-1707) distributed food among the poorest people, opened his treasury to grant money, and remitted the rents of his cultivators during the famine of 1661 in the North-Western provinces.

granaries. Moreover, temples and financial elites provided charity in cash and food, although public and private resources were limited.¹⁰²

Instead, the EIC scrupulously collected its taxes. According to Ira Klein, millions of Indian lives were sacrificed in the nineteenth century because the pull of humanitarianism was not as strong as that of Malthusianism.¹⁰³ Malthusianism proved useful in inspiring the EIC's *laissez-faire* policies in response to Indian famines. Malthus considered famines the result of overpopulation. Famine victims were the poorest and, if such deaths were prevented, population growth would have reduced the available economic resources *per capita*. Thus, if government had spent more revenue on famine relief, an even larger proportion of the population would have become poor. Famines did the work of Nature.¹⁰⁴ Not surprisingly, Thomas Malthus was a professor at the East India Company College (1805-1834), an institution that trained EIC administrators.

Contrary to the Malthusian approach to famines as a phenomenon of nature, Mike Davis attributes famines to the liberal capitalist ideology that legitimized inaction by the imperial states. Indeed, he considers Indian famines under the British rule as “colonial genocide”.¹⁰⁵ However, Roy offers a different view. He claims that the notion of an adaptive state needs to find a place in the famine scholarship. According to him, approaches to famine that focus on public policy action overstate the capacity of states. They implicitly assume that beliefs, intentions, and the interests of politicians limit state capacity, but state power was limited by “nature”, the paucity of scientific knowledge, and the small fiscal capacity of the state in colonial India.¹⁰⁶ However, the data I have compiled on the fiscal balances of EIC rule in India offers a different

¹⁰² Kumar, “States and Civil,” 2268.

¹⁰³ Klein, “When the Rains Failed,” 189.

¹⁰⁴ Caldwell, “Malthus and the Less Developed World,” 683.

¹⁰⁵ Davis, *Late Victorian Holocausts*.

¹⁰⁶ Roy, “Indian Famines.”

picture. It does not show a small fiscal capacity, but a fiscal expenditure deliberately channeled to the army, the civil administration, and the management of debt, according to EIC preferences and with the approval of the British Parliament.

5. EIC Debt: Unrequited Exports

According to Marxist-nationalist historians, unrequited exports from India to London – i.e. the excess of Indian exports to, over imports from, the metropolis that were not met with a counterpart commercial return – provided the main channel for draining India’s social surplus.¹⁰⁷ Until 1757, Indian exports to Britain were settled with bullion, as reflected in the commercial books of the EIC.¹⁰⁸ After 1757 however, the EIC virtually ceased to export bullion in exchange for commodities. India received no specie or goods to balance its trade accounts; instead, money to pay for commodities that the EIC shipped to London arose ultimately from land revenue collected in India.¹⁰⁹ Part of the surplus realized through the trade and revenue system in Bengal was used to extend British dominion over the rest of India and to balance the trade account with China, with whom Britain normally had a deficit until about the first-quarter of the nineteenth century. The rest was transferred to Britain as unrequited export surplus, which is interpreted as the drain of wealth, a “tribute” paid by India to Britain for the cost of being “civilized.”¹¹⁰ That is, Britain simply consumed this tribute without exporting anything to India in return.¹¹¹

With the purpose of determining India’s contribution to the British balance of payments during the French Wars, Cuenca-Esteban has estimated commercial “net transfers” from India to

¹⁰⁷ Naoroji, *Poverty and Un-British Rule in India*, 32–36; Sinha, *Economic History of Bengal*, vol. 1, 230–38; Ganguli, “Dadabhai Naoroji”; Chandra, *Rise and Growth*, 644–49; Habib and Mitra, *Essays in Indian History*, 283; Chandra, *Essays on Colonialism*, 93; Mukherjee, “Empire,” 75–77.

¹⁰⁸ Chaudhuri, *Trading World of Asia*; Noguees-Marco, “Trade Imbalances.”

¹⁰⁹ Bagchi, *Political Economy of Underdevelopment*, 80–81; Habib, “Studying a Colonial Economy,” 358; Banerji, “White Man’s Burden,” 2974.

¹¹⁰ Mukherjee, “Empire.”

¹¹¹ Marx, *Capital*, 433.

Britain, which amounted around £30 million from 1758 to 1815.¹¹² Net transfers are calculated as British imports from India minus British exports of goods and bullion to India. They include imports from China to London minus exports of British goods and bullion to China. British trade deficit with China is included because it was financed with surpluses accumulated by merchants in India and with Indian goods directly exported to China by the EIC.¹¹³ Cuenca-Esteban claims that Indian transfers to Britain have been ignored in recent historiography, despite the vital role they played in the British balance of international payments during the French Wars. According to him, the neglect might be explained by the use of classic (Western) estimations of the drain of wealth to downplay its significance for British national income.¹¹⁴

The balance of payments identity is defined by the following equation:

$$\text{Trade Account} + \text{Capital Account} + \text{Financial Account} = 0 \quad (4)$$

The Trade Account is exports minus imports of goods. It is usually assumed that financial flows were negligible in this period, so trade imbalances would have to be settled with compensatory bullion flows in the Capital Account.¹¹⁵ However, financial flows were not negligible in the Anglo-Indian balance of payments. In fact, what Cuenca-Esteban describes as the “net transfers” from India to Britain were nothing but the Financial Account. As I now explain, they captured the role of commercial debt to settle the balance of trade. This, in turn, can be used as a meaningful measure of unrequited exports.

In the second half of the eighteenth century, the East India Company began issuing Company bills payable in London for British trade with India and China, and Company bills

¹¹² Cuenca-Esteban, “British Balance of Payments,” table 1; Cuenca-Esteban, “India’s Contribution,” table 1.

¹¹³ Cuenca-Esteban, “India’s Contribution,” 160.

¹¹⁴ Cuenca-Esteban, “India’s Contribution,” 156. For the classic (Western) estimations, see: Marshall, *East Indian Fortunes*, 262–71; Furber, *John Company at Work*, 305–24.

¹¹⁵ Hume, “Balance of Trade.”

payable in Bengal (and, rarely, Bombay) for British trade with China.¹¹⁶ Sometimes short-term commercial debt remained unpaid after maturity, so it became *de facto* long-term debt. Other times, short-term commercial debt was consolidated in long-term debt, principally issued in London by the EIC, and largely subscribed by its European civil servants settled in India, although some debt was held by Indian business interests as well.¹¹⁷ The EIC's funding of private trade with India continued after it ceased its own trading activity in 1833 as it controlled the system of transferring money between India and Britain until the 1850s.¹¹⁸

In general, commercial debt is a legitimate instrument to finance trade, because it is later repaid by the indebted party. However, in this case, commercial debt became a form of expropriation because it was never paid by the EIC, but ultimately by Indian society itself. In summary, the mechanism whereby the EIC managed to use legally commercial debt as a means to generate unrequited exports had three parts. First, as we have seen in section 1, the total amount of "debt" registered in the EIC budgets comprised not only territorial debt, but also commercial debt. These were serviced by drawing on territorial revenues. Aggregating commercial debt with territorial debt, as was done, thus ensured that commercial debt, just like territorial debt would be serviced from territorial revenues. Therefore, commercial debt was costless for the commercial branch of the EIC because the interest it generated was charged to the territorial account.

¹¹⁶ Greenberg, *British Trade*; Chung, "Britain-China-India Trade Triangle"; Marshall, *East Indian Fortunes*.

¹¹⁷ Chaudhuri, "India's Foreign Trade," 346. In 1853, many of the debts were owed in London, but all the interest was payable in India (Allen, *India, Ancient and Modern*, 315). In 1836, out of a total Registered Debt of £27.6 million, £20.4 million was estimated to be held by Europeans settled in India (74 percent of the total) and £7.2 million by Indians (26 percent of the total) (Chaudhuri, "India's Foreign Trade," footnote 1). Roy ("Economic History of Early Modern India," 1661; *A Business History of India*, 22–51) focuses on the relevance of the transition to colonialism in the process of relocation and concentration of Indian capital in EIC ports from the Mughal Empire's collapse to EIC rule. Indian capitalism shifted from overland trade in the Indo-Gangetic plains towards the East India Company's ports, involving a migration of private enterprise from the interior to the coasts.

¹¹⁸ Suzuki, "Rise and Decline."

Second, the EIC used territorial surpluses to finance British trade deficits with India. In 1812, Sir John Shore, Governor-general of India, recognized that “the company’s trade produces *no equivalent return* ... The Company are merchants as well as sovereigns of the country. In the former capacity, they engross its trade; whilst in the latter, they appropriate the revenues. The remittances to Europe of revenues are made in the commodities of the country, which are purchased by them.”¹¹⁹ To understand the mechanism, imagine a private trader in London who wants to pay for commodities in India. He has two options. He can either send bullion, or he can pay through the EIC without sending bullion. If he chooses the latter, the EIC in India will advance the payment to the Indian exporter against its territorial surpluses, and will issue a bill of exchange payable by the English importer in London. This settlement mechanism permitted the EIC to repatriate territorial surpluses without moving specie.

The third part of the mechanism consisted of the consolidation as Indian public debt of the commercial debt accumulated previously. Before 1833, the EIC’s total debt – including commercial debt – had been registered in the budget under the heading “Bond and other Debts owing by the East India Company, at their several Presidencies in the East Indies”. But the termination of the EIC’s commercial charter in 1833, because it involved the liquidation of the commercial branch, involved the difficult exercise of assigning outstanding assets and debts (whether territorial or commercial) to different accounts. According to Thomas Macaulay, a member of the ruling Whig majority, “there were two ways of settling the question – adjudication and compromise”. Adjudication presented great difficulties, which were “not arithmetical, but political”, and rose from the inter-mingling of the “two characters” of the

¹¹⁹ *The Fifth Report from the Select Committee on the Affairs of the East India Company*, London, 1812, vol. 1, p. 183; emphasis added. Indeed, the EIC registered commercial debt under the heading “(Indian) exports not paid for,” which is tantamount to the “unrequited exports” concept of Marxist-nationalist historians (Anderson, *A General View*, 51).

Company, the “trader” and the “sovereign.” In the end, the EIC’s commercial and political functions were deemed inextricable. Concluding that a satisfactory adjudication could not be found, Macaulay advocated a “compromise” that essentially charged to Indian society the Company’s commercial debts.¹²⁰

Indeed, the final compromise reached between the EIC and the British Crown transferred the *whole* debt burden from the EIC to Indian public debt. The 1833 Acts established that from then on, EIC debts would be serviced by the revenue of Indian territories.¹²¹ As a result, after 1833, EIC debts stopped being registered in its budgets under the heading “Bond and other Debts *owing by the East India Company*, at their several Presidencies in the East Indies,” and came to be registered under the heading “An account of the *Public Debts*, bearing Interests, outstanding at the several Presidencies in the East Indies,” which underscores that the EIC debt had assumed the character of an Indian public debt.¹²² The heading “Public Debts” now comprised the commercial debt that had not been settled with territorial surpluses during the period from 1757 to 1833 and was thus payable by Indian society. What is more, this practice of charging commercial debt to the Indian public debt continued after 1833 because the EIC retained its role as the financial engine of private trade.

Although Macaulay highlighted the political difficulties in separating commercial and territorial debts, he also recognized the “arithmetical” feasibility to do so. This is what I have done. The approach that I pioneer enables forming an idea of the magnitude of total unrequited

¹²⁰ Macaulay, T. B. (1833): “Government of India”. A Speech Delivered in the House of Commons on the 10th July 1833, in *Miscellaneous Writings and Speeches* (volume 4)

¹²¹ Act to Regulate the Trade to China and India, 1833, 3 & 4 Will 4, c. 93, and St. Helena Act, 1833, 3 & 4 Will 4, c. 85. See Section 1. See also “A bill (as passed by the Honourable the House of Commons) for effecting an Arrangement with the East-India Company, and for the better Government of His Majesty's Indian Territories” (July 27, 1833), in *Preliminary Papers respecting the East-India Company's Charter* (London, 1833), 411.

¹²² Author’s italics. Official statistics also registered the EIC debt as Indian public debt. See *Statistical abstract relating to British India from 1840 to 1865* (London: Her Majesty’s Stationary Office, 1865), Table n.8. “Amount of the Public Debt of British India,” reproduced in Digital South Asia Library (<http://dsal.uchicago.edu/>).

exports, and thus the drain of wealth directly linked to trade activity. The proper measure for this, I suggest, is a counterfactual measure of the commercial debt, i.e. the one which would have been observed had the commercial and territorial branches of the EIC operated independently; that is, had territorial surpluses not been used to finance trade deficit (which is equivalent to the financial account according to the balance of payment identity defined in equation 4)

To that end, I start from the benchmark year 1815. For that date, Cuenca-Esteban has estimated the commercial debt outstanding as £30.2.¹²³ Because the total debt of the EIC is compiled in its budgets, this gives me in turn the territorial debt in 1815. Territorial debt is the total debt minus the commercial debt (equation 5):

$$\text{Total debt}_{\text{year } i} = \text{Commercial debt}_{\text{year } i} + \text{Territorial debt}_{\text{year } i} \quad (5)$$

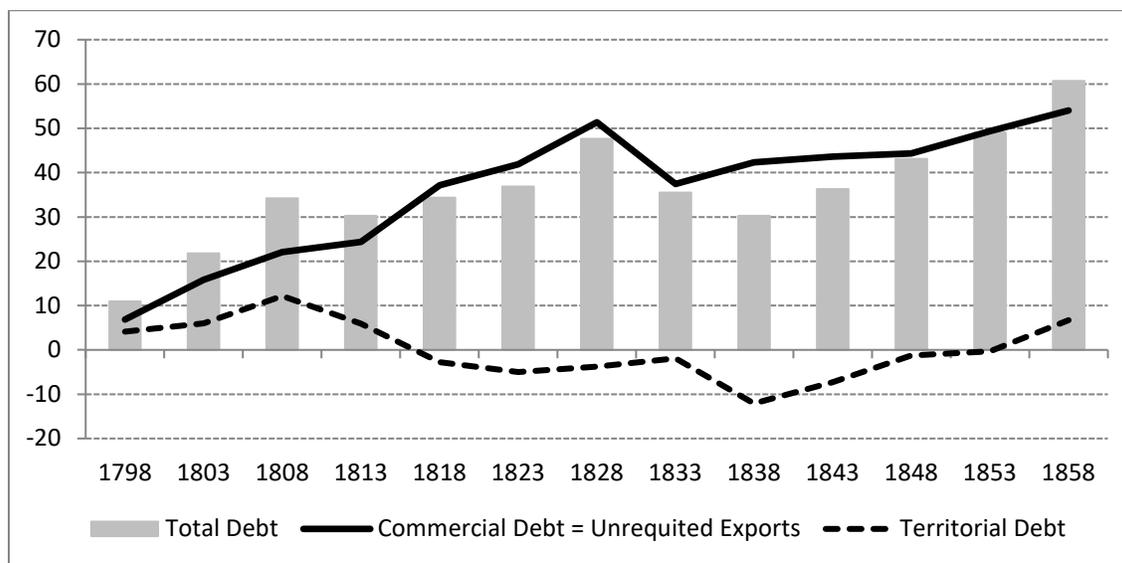
Next, given territorial debt in 1815, I calculate territorial debt between 1798 and 1858 using the annual territorial deficits and surpluses provided in EIC budgets. They are generated by the following equation:¹²⁴

$$\text{Territorial debt}_{\text{year } i} = \text{Territorial debt}_{\text{year } i-1} + \text{Fiscal deficit}_{\text{year } i} \quad (6)$$

Once I have calculated annual territorial debt, I can derive annual commercial debt as total debt minus territorial debt (equation 5). Results are shown in Figure 1.

¹²³ Cuenca-Esteban, "British Balance of Payments," 66: "The arguably minimum transfers estimated here for 1758-1815 total £38 million, or £30.2 million once British bullion exports to India are deducted".

¹²⁴ Territorial deficits and surpluses are available in Hendriks, "On the Statistics."

FIGURE 1. UNREQUITED EXPORTS FROM INDIA TO BRITAIN, 1798-1858**(selected years, quinquennial frequency), million pounds sterling**

Sources: Author’s computations. India Office Records, British Library, L/AG/11/1/1 - L/AG/11/1/6, 1785-1857; Cuenca-Esteban, “British Balance of Payments”; Cuenca-Esteban, “India’s Contribution”; Hendriks, “On the Statistics.”

The data represented in Figure 1 is consistent with piecemeal estimates offered in the Marxist-nationalist literature. For instance, Habib has calculated an excess of Indian imports over exports of around £2.5 million per year between 1798 and 1803.¹²⁵ This is broadly consistent with my estimation as shown in Figure 1: I find that commercial debt increased by £9 million in those five years, implying an annual excess of imports over exports of about £1.8 million. Likewise, Habib has estimated that the commercial debt in 1803 represented 9 percent of the GNP of the British possessions in India at that time, a figure he considers a “crippling drain of

¹²⁵ Habib, “Colonialization of the Indian Economy,” 28–29.

wealth for any economy.”¹²⁶ My own calculation gives a ratio of commercial debt to nominal Indian GDP in 1803 as only 4 per cent, but this ratio is underestimated because available GDP estimates comprise the whole of India rather than British India alone, as in Habib’s calculation.¹²⁷

Turning to dynamics, Figure 1 shows that commercial debt increased substantially in absolute value during the first half of the nineteenth century reaching more than 10 percent of total Indian GDP in 1833, which was also nearly 10 per cent of British GDP when the EIC’s commercial charter was terminated. In other words, had the EIC paid back its commercial debt in 1833, this would have represented a transfer of nearly 10 per cent of British GDP from Britain to India. But this did not happen, and, afterwards, commercial debt became unrequited exports. Unrequited exports kept increasing from 1833 to 1858, when the EIC’s territorial charter ceased. In 1858, they represented 13 per cent of Indian GDP (nearly 9 per cent of British GDP). According to Marxist-nationalist historians, if Indian “tribute” had been invested in India for productive uses instead of being transferred to London, it would have contributed to Indian development.

¹²⁶ Habib, “Colonialization of the Indian Economy,” 28–29. According to him, by 1801, the total rate of capital formation in Britain at this crucial stage of the Industrial Revolution was probably no more than 7 percent of GDP, so India was furnishing a substantial amount of the total British national savings transformed into capital. On the contrary, Marshall does not think that Indian fortunes transferred to London were relevant for Britain because relatively abundant capital resources existed in eighteenth-century Britain and an over-all increase in capital accumulation was not a major factor in the development of industry late in the century (Marshall, *East Indian Fortunes*, 256).

¹²⁷ GDP in Broadberry Custodis, and Gupta, “India and the Great Divergence,”.

CONCLUSIONS

This paper has analyzed the Marxist theory of the drain of wealth under East India Company rule (1757-1858). In the existing literature, the drain of wealth is theorized as a diversion of capital from the Indian economy towards the colonial enterprise. Marx identified this mechanism critically, and his conceptualization of the drain of wealth emphasized the role played by EIC rule. Subsequent Marxist-nationalist historical scholarship recognized several channels that facilitated the drain: excessive land taxation hampered agriculture, unproductive spending on the army and an expensive civil administration only served to sustain imperial power, and the systematic unrequited export of goods from India to Britain did not generate a corresponding inflow of capital.

In this paper I have analyzed the budgets of the EIC in order to conceptualize and measure the channels of the drain of wealth and the interrelations among them. The British Parliament held the EIC accountable for its Indian territories with the Regulating Act of 1773 and Pitt's India Act of 1784 and, from that moment to the Indian Rebellion of 1857, EIC accounting developed according to the regulations of the British Parliament, for which it was produced and to which it was submitted. As the quantitative registry of its territorial affairs in India, EIC accounting is an invaluable primary source with which to measure the drain of wealth.

My main findings are the following. Firstly, according to Marxist-nationalist historical scholarship, the land tax levied by the EIC was excessive and paid by poor peasants, which caused huge inequality, extreme poverty, and agricultural stagnation. My analysis of the EIC budgets has shown that land taxes were indeed the most important source of territorial revenue. I find that land revenue was an extractive tax, amounting to around half of gross production

according to several estimations. That the EIC's land-tax rates were based on those of the previous Mughal rulers implies threads of continuity between Mughal rule and that of the EIC, but it did not reduce the extractive nature of land taxation. In fact, the EIC charged extractive land taxes in a society whose *GDP per capita* fell close to bare-bones subsistence in the early nineteenth century. Because land taxes primarily affected agricultural laborers, they lived below subsistence levels. Taxation based mainly on land revenues intensified poverty and probably made agriculture less productive.

Secondly, Marxist-nationalist historical scholarship has linked high taxation with non-productive expenditure in a colonial society, including significant expenditure on the army and imperial civil administration—expenditures that were disconnected from the development of the Indian economy and the well-being of its population. My analysis of EIC budgets has shown that military expenditures averaged nearly three quarters of expenses. Military charges, civil charges, and interest on debt consumed the vast majority of the fiscal budget. As a consequence, productive expenses were tiny. Especially important is the case of irrigation systems. Contrary to Mughal practice, the EIC neither invested in nor repaired irrigation systems, which reduced agricultural productivity and intensified famines during the recurrent episodes of drought.

Finally, the unrequited export of goods from India to Britain is probably the least understood and most controversial channel of the drain of wealth. Using EIC budgets and complementary accounting, I have shed light on the mechanism whereby trade could become a form of exploitation. The EIC conceived commercial-financial and territorial affairs as complementary and, as a consequence, combined the accounting related to the two branches of activity. After 1757, the EIC started to generate debt instead of paying the Anglo-Asian commercial deficit in bullion. Debt is *a priori* a legitimate mechanism to settle the balance of

payments. However, commercial debt was discharged with the fiscal surpluses, which could have been used instead to fund productive expenditures for Indian development. Additionally, commercial debt was higher than the accumulated fiscal surpluses, so the EIC accumulated debt that was transferred by the British government from the EIC liability to Public Indian debt. In 1858, when the EIC's territorial charter was terminated, the amount of unrequited exports charged to Indian public debt represented 13 per cent of Indian GDP.

To conclude, my examination of the budgets of the EIC leads me to conclude in favor of the Marxist-nationalist theory of the drain of wealth. There was a drain of wealth and its effect on underdevelopment deserves further research.

REFERENCES

- Acemoglu, Daron, and James A. Robinson. "Why is Africa Poor?" *Economic History of Developing Regions* 25, no. 1 (June 2010): 21–50. <https://doi.org/10.1080/20780389.2010.505010>.
- Allen, David Oliver. *India, Ancient and Modern, Geographical, Historical, Political, Social, and Religious: With a Particular Account of the State and Prospects of Christianity*. Boston: J.P. Jewett, 1856.
- Anderson, George. *A General View of the Variations Which Have Been Made in the Affairs of the East-India Company, since the Conclusion of the War, in India, in 1784*. London: John Stockdale, 1792.
- Atkinson, Edwin Thomas. *Statistical Descriptive and Historical Account of the North-Western Provinces of India, Prepared, under Orders of the Govt. of India*. Allahabad: North-West Provinces' Government Press, 1875-1876.
- Bagchi, Amiya Kumar. *The Political Economy of Underdevelopment*. Cambridge, UK: Cambridge University Press, 1982.
- Banerjee, Abhijit, and Lakshmi Iyer. "History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India." *The American Economic Review* 95, no. 4 (September 2005): 1190-1213.
- Banerjee, Tarasankar. *History of Internal Trade Barriers in British India. Bengal Presidency (1765-1836)*. Calcutta: Asiatic Society, 1972.

- Banerji, Arun. "White Man's Burden: India and Britain in the 19th Century." *Economic and Political Weekly* 40, no. 27 (July 2005): 2973–78.
- Bayly, Christopher Alan. *Indian Society and the Making of the British Empire. The New Cambridge History of India (Vol II, Part 1)*. Cambridge, UK: Cambridge University Press, 1988.
- . *Rulers, Townsmen, and Bazaars: North India Society in the Age of British Expansion, 1770-1870*. Cambridge, UK: Cambridge University Press, 1983.
- Besley, Timothy, and Torsten Persson. "Taxation and Development." In *Handbook of Public Economics*, edited by Alan Auerbach, Raj Chetty, Martin Feldstein and Emmanuel Saez, 51–110. North Holland: Newnes, 2013.
- Bowen, Huw V. *Revenue and Reform: The Indian Problem in British Politics, 1757-1773*. Cambridge, UK: Cambridge University Press, 1991.
- . *The Business of Empire: The East India Company and Imperial Britain, 1756–1833*. Cambridge, UK: Cambridge University Press, 2006.
- Broadberry, Stephen, Bruce M. S. Campbell, Alexander Klein, Mark Overton, and Bas van Leeuwen. *British Economic Growth, 1270-1870*. Cambridge, UK: Cambridge University Press, 2015.
- Briggs, John. *The Present Land-Tax in India considered as a Measure of Finance, in Order to Show its Effects on the Government and the People of that Country, and on the Commerce of Great Britain*. London: printed for Longman, Rees, Orme, Brown, and Green, 1830
- Broadberry, Stephen, Johann Custodis, and Bishnupriya Gupta. "India and the Great Divergence: An Anglo-Indian Comparison of GDP Per Capita, 1600–1871." *Explorations in Economic History* 55 (January 2015): 58–75. <https://doi.org/10.1016/j.eeh.2014.04.003>.
- Broadberry, Stephen, and Bishnupriya Gupta. "Indian Economic Performance and Living Standards, 1600-2000." In *A New Economic History of Colonial India*, edited by Latika Chaudhary, Bishnupriya Gupta, Tirthankar Roy and Anand V. Swamy, 15–32. London: Routledge, 2016.
- Caldwell, John C. "Malthus and the Less Developed World: The Pivotal Role of India." *Population and Development Review* 24, no. 4 (December 1998): 675–96. <https://doi.org/10.2307/2808021>.
- Capper, John. *The Three Presidencies of India: A History of the Rise and Progress of the British Indian Possessions*. London: Ingram, Cooke, 1853.
- Chandra, Bipan. *Essays on Colonialism*. London: Orient BlackSwan, 1999.
- . "Reinterpretation of Nineteenth Century Indian Economic History." *The Indian Economic & Social History Review* 5, no. 1 (March 1968): 35–75. <https://doi.org/10.1177/001946466800500103>.

- . *The Rise and Growth of Economic Nationalism in India: Economic Policies of Indian National Leadership, 1880-1905*. New Delhi: People's Publishing House, 1966.
- Chaudhuri, Kirti N. *The Trading World of Asia and the English East India Company, 1660-1760*. Cambridge, UK: Cambridge University Press, 1978.
- . "India's Foreign Trade and the Cessation of the East India Company's Trading Activities, 1828-40." *The Economic History Review* 19, no. 2 (August 1966): 345–63. <https://doi.org/10.2307/2592256>.
- Chung, Tan. "The Britain-China-India Trade Triangle (1771-1840)." *The Indian Economic & Social History Review* 11, no. 4 (January 1974): 411–31. <https://doi.org/10.1177/001946467401100402>.
- Clingingsmith, David, and Jeffrey G. Williamson. "Deindustrialization in 18th and 19th Century India: Mughal Decline, Climate Shocks and British Industrial Ascent." *Explorations in Economic History* 45, no. 3 (July 2008): 209–34. <https://doi.org/10.1016/j.eeh.2007.11.002>.
- Colebrooke, Henry Thomas. *Remarks on the Present State of the Husbandry and Commerce of Bengal*. Calcutta: Privately Printed, 1795.
- Cuenca-Esteban, Javier. "India's Contribution to the British Balance of Payments, 1757–1812." *Explorations in Economic History* 44, no. 1 (January 2007): 154–76. <https://doi.org/10.1016/j.eeh.2005.10.007>.
- . "The British Balance of Payments, 1772-1820: India Transfers and War Finance." *The Economic History Review* 54, no. 1 (February 2001): 58–86. <https://doi.org/10.1111/1468-0289.00184>.
- Davis, Mike. *Late Victorian Holocausts. El niño Famines and the Making of the Third World*. London and New York: Verson, 2001.
- Dincecco, Mark. *State Capacity and Economic Development: Present and Past*. Cambridge: Cambridge University Press, 2017.
- Dincecco, Mark, and Gabriel Katz. "State Capacity and Long-Run Economic Performance." *The Economic Journal* 126, no. 590 (February 2016): 189–218. <https://doi.org/10.1111/eoj.12161>.
- Dutt, Romesh Chunder. *The Economic History of India under Early British Rule: From the Rise of the British Power in 1757, to the Accession of Queen Victoria in 1837*. London: Kegan Paul, Trench, Trübner, 1906.
- Foster, William. "The India Board (1784–1858)." *Transactions of the Royal Historical Society* 11 (1917): 61–85. <https://doi.org/10.2307/3678436>.
- Furber, Holden. *John Company at Work: A Study of European Expansion in India in the Late 18th Century*. Cambridge, MA: Harvard University Press, 1951.

- Ganguli, Birendranath N. "Dadabhai Naoroji and the Mechanism of 'External Drain'." *The Indian Economic & Social History Review* 2, no. 2 (April 1965): 85–102. <https://doi.org/10.1177/001946466400200201>.
- Ghosh, Baidyanath. N. *Gandhian Political Economy: Principles, Practice and Policy*. Aldershot: Ashgate, 2007.
- Ghosh, Kali Charan. *Famines in Bengal, 1770-1943*. Calcutta: Indian Associated Publishing Co., 1944.
- Greenberg, Michael. *British Trade and the Opening of China, 1800-42*. Cambridge, UK: Cambridge University Press, 1951.
- Grove, Richard H. "The Great El Nino of 1789–93 and its Global Consequences: Reconstructing an Extreme Climate Event in World Environmental History", *The Medieval History Journal* 10 (1-2) (2006): 75-98. <https://doi.org/10.1177/097194580701000203>.
- Habib, Irfan. "Colonialization of the Indian Economy, 1757 - 1900." *Social Scientist* 3, no. 8 (March 1975): 23–53. <https://doi.org/10.2307/3516224>.
- . "Studying a Colonial Economy—Without Perceiving Colonialism." *Modern Asian Studies* 19, no. 3 (1985): 355–81. <https://doi.org/10.1017/S0026749X00007654>.
- . *The Agrarian System of Mughal India, 1556-1707*. London: Asian Publishing House, 1963.
- Habib, Irfan, and Ashok Mitra. *Essays in Indian History: Towards a Marxist Perception*. New Delhi: Tulika Print Communication Services, 1995.
- Hendriks, Frederick. "On the Statistics of Indian Revenue and Taxation." *Journal of the Statistical Society of London* 21, no. 3 (September 1858): 223–96. <https://doi.org/10.2307/2338224>.
- Hume, David. "Of the Balance of Trade". In *Essays and Treatises on Several Subjects*, 172-78. London, Printed for A. Millar; and A. Kincaid and A. Donaldson, at Edinburgh, 1758.
- Husain, Iqbal. (ed.). *Karl Marx on India: From the New York Daily Tribune (Including Articles by Fredrick Engels) and Extracts from Marx-Engels Correspondence 1853-1862*. New Delhi: Tulika Books, 2006.
- India Office Records, British Library, London.
- Klein, Ira. "When the rains failed: famine, relief, and mortality in British India." *The Indian Economic and Social History Review* 21, no. 2 (June 1984): 185-214. <https://doi.org/10.1177/001946468402100203>.
- Kumar, Dharma. "States and Civil Societies in Modern Asia." *Economic and Political Weekly* 28, no. 42 (October 1993): 2266–69.
- Kumar, Dharma, ed. *The Cambridge Economic History of India, 1757-1970*. Cambridge, UK: Cambridge University Press, 1983.

- Maddison, Angus. *Class Structure and Economic Growth: India and Pakistan since the Moghuls*. London: Taylor & Francis, 1971.
- Mahalanobis, Prasanta Chandra, and D. Bhattacharya. "Growth and Population in India and Pakistan, 1801-1961." *Artha Vijnana* 18 (March 1976): 1–10. <https://doi.org/10.21648/arthavij/1976/v18/i1/116446>.
- Mann, Michael. "A Permanent Settlement for the Ceded and Conquered Provinces: Revenue Administration in North India, 1801-1833." *The Indian Economic & Social History Review* 32, no. 2 (June 1995): 245–69. <https://doi.org/10.1177/001946469503200205>.
- . "From Ledger to Budget: British Fiscal Imperialism, 1750-1800." *Internationales Asienforum* 33, no. 3-4 (January 2002): 247–70.
- Marriott, John, Bhāskara Mukhopādhyāya, and Partha Chatterjee. *Britain in India, 1765-1905: The Public Realm*. London: Pickering & Chatto, 2006.
- Marshall, Peter James. *Problems of Empire. Britain and India, 1757-1813*. London and New York: Routledge, 1968.
- . *Bengal—The British Bridgehead: Eastern India, 1740-1828*. Cambridge, UK: Cambridge University Press, 1987.
- . *East Indian Fortunes: The British in Bengal in the Eighteenth Century*. Oxford: Clarendon Press, 1976.
- Marx, Karl. *Capital: A Critique of Political Economy. The Process of Capitalist Production as a Whole*. Volume III. New York: International Publishers, 1894, proofed and corrected by C. Clayton (2006-7) and M. Harris (2010).
- Marx, Karl, and Friedrich Engels. *On Colonialism*. Moscow: Progress Publishers, 1968.
- Mishra, Brijesh K., and Siddhartha Rastogi. "Colonial Deindustrialisation of India: A Review of Drain Theory." *South Asian Survey* 24, no. 1 (March 2017): 37–53. <https://doi.org/10.1177/0971523118782755>.
- Moosvi, Shireen. *The Economy of the Mughal Empire: C.1595; a Statistical Study*. Delhi: Oxford University Press, 1987.
- Morris, D. Morris. "Towards a Reinterpretation of Nineteenth-Century Indian Economic History." *The Journal of Economic History* 23, no. 4 (December 1963): 606–18. <https://doi.org/10.1017/S0022050700109271>.
- Mukherjee, Aditya. "Empire: How Colonial India Made Modern Britain." *Economic and Political Weekly* 45, no. 50 (December 2010): 73–82.
- . "The Return of the Colonial in Indian Economic History: The Last Phase of Colonialism in India." *Social Scientist* 36, no. 3/4 (March 2008): 3–44.
- Naik, J. V. "Forerunners of Dadabhai Naoroji's Drain Theory." *Economic and Political Weekly* 36, no. 46/47 (November 2001): 4428–32.
- Naoroji, Dadabhai. *Poverty and Un-British Rule in India*. London: Swan Sonnenschein, 1901.

- Naoroji, Dadabhai, and Chunilal Lallubhai Parekh. *Essays, Speeches, Addresses and Writings, on Indian Politics*. Bombay: Caxton Printing Works, 1887.
- Nogues-Marco. "Trade Imbalances or Specie Arbitrage? Anglo-Asian Bullion Flows in the Early Modern Period, 1664-1811", unpublished working paper.
- North-Western Provinces. *Directions for Settlement Officers: Promulgated under the Authority of the Honorable the Lieutenant Governor of the North Western Provinces*. Agra: R. Miller, 1844.
- O'Brien, Patrick. "The Nature and Historical Evolution of an Exceptional Fiscal State and its Possible Significance for the Precocious Commercialization and Industrialization of the British Economy from Cromwell to Nelson." *The Economic History Review* 64, no. 2 (May 2011): 408–46. <https://doi.org/10.1111/j.1468-0289.2010.00538.x>.
- O'Brien, Patrick. "The Costs and Benefits of Mercantilist Warfare." *Financial History Review* 25, no. 1 (2018): 97–112. <https://doi.org/10.1017/S0968565017000312>.
- Parthasarathi, Prasannan. "The History of Indian Economic History." In *Routledge Handbook of Global Economic History*, edited by Francesco Boldizzoni and Pat Hudson, 281–92. London and New York: Routledge, 2016.
- Postan, Michael Moisey. "Medieval Agrarian Society in its Prime. England." In *The Agrarian Life of the Middle Ages, Volume I of the Cambridge Economic History of Europe*, edited by M. M. Postan, 548–632. London: Cambridge University Press, 1966.
- Ranade, Mahadev Govind. "Indian Political Economy." In *Essays on Indian Economics: A Collection of Essays and Speeches*, edited by Mahadev Govind Ranade, 3–25. Bombay: Thacker & Company, 1890.
- Reddy, Krishna. *Indian History*. New Delhi: McGraw-Hill, 2006.
- Richards, John F. "Fiscal States in Mughal and British India." In *The Rise of Fiscal States*, edited by Yun-Casalilla and O'Brien, 410–41. Cambridge, UK: Cambridge University Press, 2012.
- . *The Mughal Empire*. Cambridge, UK: Cambridge University Press, 1993.
- Rickards, Robert. *India; or Facts Submitted to Illustrate the Character and Conditions of the Native Inhabitants*. London: Smith, Elder & Co., 1829.
- Roy, Tirthankar. *A Business History of India: Enterprise and the Emergence of Capitalism from 1700*. Cambridge, UK: Cambridge University Press, 2018.
- . "Economic History and Modern India: Redefining the Link." *Journal of Economic Perspectives* 16, no. 3 (Summer 2002): 109–30. <https://doi.org/10.1257/089533002760278749>.
- . "Economic History: An Endangered Discipline." *Economic and Political Weekly* 39, no. 29 (July 2004): 3238–43.
- . "Economic History of Early Modern India: A Response." *Modern Asian Studies* 49, no. 5 (2015): 1657–66. <https://doi.org/10.1017/S0026749X14000602>.

- . “Rethinking the Origins of British India: State Formation and Military-Fiscal Undertakings in an Eighteenth Century World Region.” *Modern Asian Studies* 47, no. 4 (2013): 1125–56. <https://doi.org/10.1017/S0026749X11000825>.
- . “The Rise and Fall of Indian Economic History 1920–2013.” *Economic History of Developing Regions* 29, no. 1 (January 2014): 15–41. <https://doi.org/10.1080/20780389.2014.922843>.
- . “Indian Famines: Natural or Manmade?” In *Quest of the Historian's Craft: Essays in Honour of Prof. B.B. Chaudhuri*, edited by Dasgupta and Bandopadhyay, 75-102, New Delhi: Manohar, 2018.
- Sewell, William H. “A Strange Career: The Historical Study of Economic Life.” *History and Theory* 49, no. 4 (December 2010): 146–66. <https://doi.org/10.1111/j.1468-2303.2010.00564.x>.
- Sinha, Narendra Krishna. *The Economic History of Bengal*. Calcutta: Firma K. L. Mukhopadhyay, 1956-70.
- Stern, Philip J. *The Company-State: Corporate Sovereignty and the Early Modern Foundations of the British Empire in India*. Oxford: Oxford University Press, 2011.
- Stokes, Eric. “The First Century of British Colonial Rule in India: Social Revolution or Social Stagnation?” *Past & Present*, no. 58 (February 1973): 136–60. <https://doi.org/10.1093/past/58.1.136>.
- Suzuki, Toshio. “The Rise and Decline of the Oriental Bank Corporation, 1842-84.” In *The Origins of International Banking in Asia: The Nineteenth and Twentieth Centuries*, edited by Shizuya Nishimura, Toshio Suzuki, and Ranald Michie, 86-111. Oxford: Oxford University Press, 2012.
- Tharoor, Shashi. *Inglorious Empire: What the British Did to India*. London: Hurst & Co., 2017.
- Visaria, Leela, and Pravin Visaria. “Population.” In *The Cambridge Economic History of India, 1757-1970*, edited by Dharma Kumar, 463–532. Cambridge, UK: Cambridge University Press, 1983.
- Whitcombe, Elizabeth. “Irrigation.” In *The Cambridge Economic History of India, 1757-1970*, edited by Dharma Kumar, 677–736. Cambridge, UK: Cambridge University Press, 1983.
- Williamson, Jeffrey. *Trade and Poverty: When the Third World Fell Behind*, Cambridge, Mass: MIT Press