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28 July 2021

Online at https://mpra.ub.uni-muenchen.de/108977/MPRA Paper No. 108977, posted 04 Aug 2021 03:11 UTC

## Deindustrialisation and the Drain Theory: The Contours of Economic Degradation in British India

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#### Abstract

Given the lively debate on the consequences of British colonialism on the Indian economy in the realms of contemporary politics and academia, this paper attempts to trace the development of the economic history of India since the 18th century with a distinct focus on the drain theory of wealth and the question of deindustrialisation. It examines a diverse set of academic publications on this subject and compares the evidence shown by a wide range of authors to arrive at possible conclusions. It is found that the composition of the drain theory of wealth was critically questioned by scholars both home and abroad, and its set of core suppositions remain unsubstantiated. On the other hand, the evidence for the deindustrialisation hypothesis is found to be significant, at least for the regions of Gangetic Bihar and Bengal, during the early 19<sup>th</sup> century.

Keywords— drain, deindustrialisation, colonialism, economic degradation

#### 1 Introduction

The British Raj's legacy in the Indian subcontinent is often analysed from an economic lens. The anti colonial mobilisation in the 19<sup>th</sup> and the early 20<sup>th</sup> century was in part based around the systematic exploitation of the indigenous artisans and the workers, and the destruction of the textile industry. An essential instrument of this mobilisation, which took place in various forms, was the conception of the deindustrialisation theory and the drain theory of wealth by the anti colonial academics. In spite of the fact that Dadabhai Naoroji was the first one to methodically articulate the drain theory of wealth and give it substantial currency in the political sphere, the actual birth of the drain theory goes further back. 20 years before Naoroji delivered his famous lecture titled 'England's Duties to India' to the East India Association, London in 1867, a group of Maharashtrian intellectuals of the nationalist tradition including Bhaskar Pandurang Tarkhadkar, Govind Vitthal Kunte and Ramkrishna Vishwanath had posed the economic implications of the British Raj's policies as the primary evil facing the Indian people (Naik 2001). The structural destruction of the handloom industry in India was also noted by Karl Marx in one of his essays published in the New York Daily

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Tribune in 1853. In present-time India, contemporary politicians like Shashi Tharoor have played a major part in popularising the argument for reparations in the public imagination. His famous speech at the Oxford Union in favour of the motion "This house believes Britain owes reparations to her former colonies" garnered over 8 million views on Youtube and also invited a comment of approval from India's Prime Minister Narendra Modi.<sup>2</sup> Economist Utsa Patnaik's recent contribution in Agrarian and Other Histories published by the Columbia University Press, which was covered widely by both western and domestic media, included a measurement of the drain during the British Raj which amounted to \$45 trillion.<sup>3</sup> It is, therefore, clear that the debate on the economic implications of British colonialism in India is still relevant in the public discourse. Over the course of the last seven decades, the academic literature on this subject has gone under a gradual evolution and the growing research has enabled scholars to reconstruct popular theories with fresh constraints and realities. Different authors have devised different ways to measure and define these theories, and have arrived at several different results. This provides a pertinent opportunity to economic historians to grapple with these ideas and explore their evidence in detail. The purpose of this paper is to trace the evolution of the existing literature and provide a comprehensive review of the same.

### 2 The Drain Theory

#### 2.1 Pre Independence

The anti-colonial sentiment had started to grow in the collective conscience of the public in the mid 19<sup>th</sup> century. The Bombay Gazette made a call on 1st July 1841 for submissions from its readers who were interested in publishing their dissent against the British Government. Bhaskar Tarkhadkar was one of the many people who submitted their scathing critiques of the Raj to the English daily. But what distinguished him from the rest was his emphasis on the drain of wealth from India at the hands of the colonial government. In his appraisal of Bhaskar Tarkhadkar's work, historian JV Naik wrote:

Being journalistic, their account of India's growing impoverishment under British rule, is not as systematic as that of the later drain theorists. Nevertheless, it contained all the component elements that constituted the drain: decline of the indigenous industry, transfer of wealth, excessive taxation, over assessment of land, non employment of the Indians in important civil and military positions and excessively costly character of British administration. (Naik 2001)

In particular, Tarkhadkar observed the woeful condition of the Konkani weavers, and the export of raw materials to England for cheap and the subsequent import of finished products in India at high prices. The unfavourable balance of trade between India and England was also pointed out by Ramakrishna Vishwanath. Their fellow intellectual Bhau Mahajan highlighted the heavy taxation levied by the British government on

 $<sup>1.\</sup> https://www.marxists.org/archive/marx/works/1853/06/25.htm$ 

<sup>2.</sup> https://youtu.be/f7CW7S0zxv4

 $<sup>3.\</sup> https://cup.columbia.edu/book/agrarian-and-other-histories/9789382381952 \ https://www.aljazeera.com/opinions/2018/12/19/how-britain-stole-45-trillion-from-india/property-frame-and-other-histories/9789382381952 \ https://www.aljazeera.com/opinions/2018/12/19/how-britain-stole-45-trillion-frame-and-other-histories/97893823 \ https://www.aljazeera.com/opinions/2018/12/19/how-britain-stole-45-trillion-frame-and-other-histories/97893823 \ https://www.aljazeera.com/opinions/2018/12/19/how-britain-stole-45-trillion-frame-and-other-histories/97893823 \ https://www.aljazeera.com/opinions/2018/12/19/how-britain-stole-45-trillion-frame-and-other-histories/97893823 \ https://www.aljazeera.com/opinions/2018/12/19/how-britain-stole-45-trillion-frame-and-other-histories/9789382 \ https://www.aljazeera.com/opinions/2018/12/19/how-britain-stole-45-trillion-frame-and-other-histories/9789382 \ https://www.aljazeera.com/opinions/2018/12/19/h$ 

landless labourers and petty peasants which effectively left them helpless in front of the khoti-zamindars (Naik 2001).

The most familiar, and perhaps the most influential, name associated with the concept of drain is that of Dadabhai Naoroji. His first academic work on the drain theory of wealth was *Poverty and the Unbritish Rule in India* published in 1901. By his own admission, the concept of drain was not entirely original. He cited the work of several British scholars to support the claim that the British government was indeed draining India of its wealth. In particular, Montgomery Martin's remarks on the state of parts of Bengal and Bihar in the period 1807-1814 were especially telling:

It is impossible to avoid remarking two facts as peculiarly striking—first the richness of the country surveyed and second, the poverty of its inhabitants.. The annual drain of £3,000,000 on British India has mounted in thirty years at 12 percent, (the usual indian rate )compound interest to the enormous sum of \$723,900,000 sterling....so constant and accumulating a drain, even in England, would soon impoverish her. How severe then must be its effects on India when the wage of a labourer is from two pence to three pence a day." He also calculates the result of the drain of £5,000,000 a year. What then must be or can be the effect of the unceasing drain which has now grown to the enormous amount of £30,000,000 a year, if not famines and plagues, destruction and impoverishment. (Naoroji 1901)

The drain theory in its initial form was understandably crude and unsophisticated. It was thought of as simply the excess of exports over imports. But unlike other scholars, Naoroji also characterised the profit on the exports from India as a factor of the drain (Chandra 1965). According to the methodology used by him in Poverty and the Unbritish Rule in India, the amount of drain in the period 1835-1872 came out to be at least £200,000,000. This did not include any interest payment, which according to him would have greatly increased the drain. Other important constituents of the drain included the expenditure on the British armed forces, remittances and other allowances to the civil servants which were essentially borne by the Indian taxpayers (Dasgupta 1993). The early conceptualisation of the drain theory was met with criticism from both British and Indian scholars. The most popular retort from the British side of the argument came from Sir Theodore Morrison. In Economic Transition in *India*, he observed that while there was certainly an excess of exports over imports, the extent of the drain was grossly overstated, evidenced by the fact that the import of gold and silver was not accounted for. But as (Dasgupta 1993) points out, the import of treasure was included in the drain calculation by the likes of Gopal Krishna Gokhale. At home, the drain theory was questioned by Bankim Chandra Chatterjee and Mahadev Govind Ranade. While Chatterjee had his reservations against the assertion that the drain had induced poverty in the Bengal rural economy, Ranade was of the opinion that there were other serious economic problems to be focused upon and that the drain theory was ultimately a matter of politics (Dasgupta 1993). The only other scholar who came close to the stature of Dadabhai Naoroji was Romesh Chunder Dutt. In the volume II of *The Economic History of India*, he wrote:

The richest country on earth stoops to levy this annual contribution from the poorest. Those who earn £42 per head ask for 10s. per head

from a nation earning £2 per head. And this I0s. per head which the British people draw from India impoverishes Indians, and therefore impoverishes British trade with India. The contribution does not benefit British commerce and trade, while it drains the life-blood of India in a continuous, ceaseless flow. (Dutt 1904)

One of his major insights was the emphasis on the economic drain caused by the export of food supply without adequate payment. He calculated a sum of 20 million sterlings between 1891-92 and 1896-97 as the total drain from food supply. This, according to him, was the major cause of the impoverishment of Indians (Dutt 1904). Some scholars have also attempted to paint a picture of the drain in the late 18th century. Using the data published by the Committee of Secrecy in 1773, Rama Dev Roy suggested that the East India Company's magnitude of investment in India provided an estimate of the drain as it was financed by the "territorial revenue" from Bengal. Between 1762 and 1771, the total amount of investment was found to be £8,394,000 (R. D. Roy 1987).

#### 2.2 Post Independence

After the independence of India in 1947, economic historians put special emphasis on the estimation of the national income of India to answer the question of drain. This unsurprisingly resulted in multiple different estimates due to varying methodologies. In 1950, Daniel Thorner took up the job of analysing nine of all the different estimates of India's national income. He found that the estimates differed from each other to such an extent that a comparison wasn't possible (Raychaudhuri 1966).

In his unflattering review of V. Shanmugasundaram's volume *The Drain Theory* written for the Indian Economic Association, which included Subrata Chakravarty's *The Drain Theory of Dadabhai Naoroji*, MM. Khullar's *Drain in Perpetuity*, AC. Minocha's *Drain Theory and its Relevance to Present Day Trade Relations between Developed and Under-Developed Countries and Rural-Urban Sectors*, Dharma Kumar wrote:

The choice of the subject was a good one. Economists can contribute to it in two ways: by using the tools of economics to analyse concepts of exploitation, forced exports and so forth, and by working out balance of payments figures which would enable one to measure the "drain", however defined, during a particular period. But instead we are given stale rhetoric and a repetition of well worn arguments and out-of-date figures. For instance, OP. Mahajan's "The Drain Theory: Fact and Fiction" makes no use of the balance of payments estimates of AK. Banerjee. Again, during the discussion one economist took it for granted that "there was no possibility of economic growth in the Nineteenth Century in India because of the institutional obstructions which impeded growth and apparently no one pointed out that other views are held. (Kumar 1971)

An underappreciated insight on the nature of the trade between India and England was provided by BR Tomlinson. In the late 19<sup>th</sup> and the early 20<sup>th</sup> century, India's share in the total imports of England stood at less than 10%. As a corollary of this

simple observation, he further noted that the share of England in the total exports from India declined from 33% to 25% between 1890 and 1911. On the other hand, India's exports to other industrial nations were increasing at the same time and were characterised by a distinct colonial undertone. Although Britain's general relationship with India at the time was colonial in nature, their bilateral trade, which mostly included semi manufactured goods, did not adequately reflect this fact (Tomlinson 1975).

It was also observed by (Kumar 1983) that there was a lack of reliable data for the major components of the drain such as "profits and interest remitted abroad, freight and insurance payments, home charges and so forth." It could be inferred from the data on foreign trade that there was indeed an economic drain from India in the first half of the 19th century, but this did not necessarily cause the impoverishment of the Indian people.

#### 2.3 The 21<sup>st</sup> Century

Modern economic historians like Tirthankar Roy and KN Chaudhuri have tended to disregard the drain theory with both qualitative and empirical arguments. Chaudhuri described the approach taken by Naoroji and Dutt as "extremely confused and largely coloured by political feelings." He further pointed out that not only had Naoroji ignored capital flows and invisible payments in the balance of payments account, he also did not take into account the positive effects of exports on domestic income, evidenced by substantial imports of monetary silver. In summary, even if it was proved that there existed transfer payments from India to England without adequate compensation, its effect was not strong enough to depress economic growth in India (Chadhuri 2003). Roy defined 'drain' as the payment for British goods and services—such as interest on public debt, salaries, and pensions paid to government officers—by India above the fair price. These payments were made from the export surplus and ultimately there was no meaningful way of knowing whether these payments were above the fair price. The discourse surrounding the drain theory spent a disproportionate amount of energy on the state when in reality it was a miniscule part of the economy; its share of total employment was only 2%. He further highlighted the fact that in the periods 1857-1865 and 1872-1884, India did make payments without appropriate compensation but the exact magnitude of such transactions was difficult to ascertain. Henceforth, however, all the payments made by India to England were in accordance with the value of a particular good or a service (T. Roy 2019)

#### 3 The Deindustrialisation Debate

The subject of deindustrialisation is closely related to the premise of the drain theory, however it has a distinct economic character of its own. It generally refers to a secular decline in the manufacturing employment and output, as well as simultaneous movement of the workforce to the rural economy due to a multitude of causes. Although it's unclear when the first conceptualisation of deindustrialisation occurred, Karl Marx's article in the New York Herald Tribune in 1853 was perhaps the first well known mention of deindustrialisation in India. In its issue on 10 June 1853<sup>4</sup>, he wrote:

<sup>4.</sup> https://www.marxists.org/archive/marx/works/1853/06/25.htm

It was the British intruder who broke up the Indian hand-loom and destroyed the spinning-wheel. England began with driving the Indian cottons from the European market; it then introduced twist into Hindostan, and in the end inundated the very mother country of cotton with cottons. From 1818 to 1836 the export of twist from Great Britain to India rose in the proportion of 1 to 5,200. In 1824 the export of British muslins to India hardly amounted to 1,000,000 yards, while in 1837 it surpassed 64,000,000 of yards. But at the same time the population of Dacca decreased from 150,000 inhabitants to 20,000. This decline of Indian towns celebrated for their fabrics was by no means the worst consequence. British steam and science uprooted, over the whole surface of Hindostan, the union between agriculture and manufacturing industry.

The destruction of the cotton textile industry was a very consequential observation in the development of this subject. One of the first scholarly works on deindustrialisation in India came from Daniel Thorner. He noted that while the evidence for a systematic deindustrialisation in the period 1881-1931 was scant, it was indeed true that the Indian handicraft industry had suffered a degradation. However, this was simply a consequence of the superiority of industrial scale production and such an effect was not particularly unique to India either (Thorner and Thorner 1962). In a response to this, Amiya Kumar Bagchi duly pointed out why India's case was special. The decline of the handicraft industry in Britain and Germany was caused by their own industrial revolutions which enabled them to absorb the unemployed labour in a new industry. On the contrary, no such fresh employment was being generated in the colonies and the destruction of the handicrafts resulted in the permanent unemployment of many (Bagchi 1976). Morris D Morris made an unanticipated argument with respect to employment in the handicraft industry. He showed that the absolute number of handloom weavers, in fact, increased in the period 1800-1947, with mild fluctuations in between. His inspection of the official statistics in 1950 revealed that the total number of people employed in the industry was 4,688,000 in India and Pakistan, with 3,125,000 of them being actively engaged in handloom weaving. Given that the total population in 1800 was somewhere around 103-125 millions and that the proportion of weavers in the labour force (50-62 millions) would have been between 7.6% and 9.4%, it was incredibly likely that there was an expansion of employment in the handloom industry in the subsequent century. Further, there was some evidence to believe that the per capita consumption of cotton as well as the yarn available for consumption might have increased since 1800. If there was no technological advancement in the industry, as was the case with the handloom industry in India, then such a development implied "either expansion in the number of weavers or increase in fulltime employment of weavers, or both" (Morris 1968). However, (Simmons 1985) drew attention to the fact that Morris had fixated, for whatever reason, much of the focus on cotton, jute, iron and steel industries and looked past the "less glamorous" ones. A peculiar finding remarked upon by (Krishnamurthy 1976) was "the possibility of a simultaneous deindustrialisation and deagriculturalisation" based on the estimates computed by Raghabendra Chattopadhyay. Krishnamurthy termed this conclusion—a decline in employment in both the manufacturing sector as well as the agricultural sector—as an "oddity". Additionally, his investigation showed that while the proportion of males working in the manufacturing industry fell from 9.1% to 8.4% in the period 1911-1931, the manufacturing increased both as a share of the total output and in per

capita terms. Thus, it was unreasonable to accept the deindustrialisation hypothesis for the given period.

Bagchi's seminal contribution to the literature was the examination of regional variation in the deindustrialisation debate, focusing on Gangetic Bihar which covered Bhagalpur, Patna-Gaya, Purnea, and Shahabad. With the help of the data collected by Francis Buchanan Hamilton, he determined the total population as well as the share of population dependent on the manufacturing industry in the years 1809-1813 and compared it with the figures for 1901. It disclosed that there was an obvious fall in the population dependent on the manufacturing industry by more than half, the dominant component of which was the textile industry. The primary reason why Gangetic Bihar's case was unique was the fact that it absorbed a large chunk of the traditional industry in the region. At an all India level, there was certainly a decline in the employment of cotton spinners, who were much greater in number than the cotton weavers (Bagchi 1976). However, the empirical inferences asserted by Bagchi, specifically with respect to the census data collected by Francis Buchanan Hamilton, were questioned by Marika Vicziany. Firstly, the census did not collect domain specific employment data, without which it was hard to separate agricultural and industry employment. The simple division between rural and urban employment did not reliably show sector wise employment because a lot of people who lived in the urban areas were involved in agriculture. Secondly, the manner in which occupations in the Indian census were defined changed considerably in the period 1881-1931. And lastly, the characterisation of the 19th century Indian economy as being a typical three sector economy with agriculture, manufacturing and services was perhaps a dubious one, since in reality it was "predominantly agrarian and preindustrial" and there was a sizable intersection among the three sectors regarding employment (Vicziany 1979). In his defense, (Bagchi 1979) responded to this critique by making it clear that he had "reclassified the Census population of 1901 with occupations in class D so as to make it conform more closely to the concept of secondary industry." The change in definitions of the occupation did not prove to be a hindrance as Buchanan Hamilton's census had extensive information on the income and background characteristics of the artisans. In fact, this change in definitions and intersection of different occupations itself was caused by the degradation of the manufacturing industry at the hands of the colonial government. Against this backdrop of occupational structure, it was observed by Peter Harnetty that the handloom weavers were, in fact, a heterogenous group, unlike what was assumed by scholars before, and that their experiences were different from one another. This was largely a product of the elaborate caste system prevalent among the Hindus which consisted of several weaving castes. For instance, the Koshtis produced high quality silk products using advanced machinery, the Koris and the Mahars produced coarse cloth, and the Momins from Burhanpur, who were Muslim weavers, were famous for weaving silver and gold wires into the cloth. The social stratification of the caste system reflected in the outcomes of the deindustrialisation in the early 19<sup>th</sup> century—the Koshtis and the Momins were able to survive the undesirable effects, while those confined to the villages like the Mahars had to either engage in low skilled part time jobs or change their occupation altogether. The emergence of the credit market, brought about by the adoption of industrial scale production of cloth, meant that the weavers had lost their fiscal autonomy to the intermediaries (Harnetty 1991).

This insight on the unequal outcomes of deindustrialisation was extended upon by (T. Roy 2001), who added that the class of artisans who became worse off were the

cotton weavers as opposed to the silk weavers who were able to survive. This was, to a great degree, a function of the competition with the Lancashire cotton mills who specialised in producing coarse and fine cloths. David Clingingsmith and Jeffrey G Williamson employed a three sector Neo-Ricardian Model—with textiles (T), grain (G), and agricultural commodity exports (C)—to examine the role of local supply side forces in enabling deindustrialisation in India. They classified the process of deindustrialisation into two periods—1760-1810 and 1810-1860. Between 1760 and 1810, it was found that the collapse of the Mughal empire and unfavourable climatic conditions were primarily responsible for the depression in the agricultural sector, which ultimately led to a decline in India's comparative advantage in the textile industry. The Industrial Revolution had reached its mature stage by 1840 and thus a good deal of India's domestic textile market was occupied by England in the second period. Henceforth, however, a combination of factors ranging from improved climatic conditions to a downturn in the nominal wages and grain prices in India, caused a mild reindustrialisation until 1913 (Clingingsmith and Williamson 2008). Indrajit Ray put an explicit focus on the experience of Bengal in the 18<sup>th</sup> and the 19<sup>th</sup> centuries. The evidence suggests that much of the deindustrialisation in Bengal started from the mid 1820s, discarding the hypothesis that places the start in the early 1810s or even further back in the 18<sup>th</sup> century. The magnitude of depression in the Bengal economy followed an upward trend "with a loss of employment of 65,000 in the 1820s, 144,000 in the 1830s, and 160,000 in the 1840" and by 1860, a total of 563000 workers had been displaced from their engagement in the economy. Although the British government's discriminatory tariff policy reduced the competitiveness of the cotton produced in Bengal, the primary cause of deindustrialisation was the huge influx of British cotton in the Indian market, spurred by the technological advances in the British industries (Ray 2009).

Tirthankar Roy expressed apprehensions towards a few subsets of the deindustrialisation phenomenon, like the supposed degradation of the iron and steel industry in India in the late 18<sup>th</sup> century. The definite increase in the imports of iron goods can be explained by the fact that the Indian industry seldom produced cannons, guns, cutlery and construction material, which were the principal component of the imports. He also offered a more nuanced perspective on the developments in the 18<sup>th</sup> and the 19<sup>th</sup> century, breaking past the often perpetuated binary—that there was a diverse set of workers out of which some prospered and some declined, that the winners gained as much, if not more, as the losers lost, and that the reason for this survival was that the competition between machinery and handloom was restricted to a limited number of goods such as the "coarse medium cotton cloth and the printed and bleached cotton cloth". Moreover, there were certain products like the fine cotton yarn and the saris made out of bordered cloth which the handloom was more adept at manufacturing than the machinery (T. Roy 2020).

#### 4 Conclusion

This subset of Indian economic history is especially gifted with a diverse body of scholarly work and an extensive set of academic dialogue. Any review of such a subject requires the perusal of evidence spread across the ideological spectrum. The richness of this subject lies in the fact that proponents of conflicting schools of thought have often tended to accept partial findings of each other. For instance, the development of the anti colonial movement saw a fascinating intersection between the Marxist and

the Nationalist academics with respect to the investigation of the economic policy of the colonial government (Ray 2015). Overtime, the analysis of India's economic history has gradually shifted from an anti-colonial theoretical framework to a more economic theory based approach—the microfoundations of labour economics, decision making under uncertainty and trade theory are some of the concepts that have been employed to interpret the experiences of former colonies. As far as the drain theory is concerned, it appears that much of the construct upon which it was built failed to has stand up to scrutiny by modern economic historians. Although it's unquestionably true that India's preeminence in the world economy was artificially degenerated by British imperialism, the specific mechanism via which this happened does not correspond to the one articulated by the drain theorists. Any critique of an event should, at the very least, involve the demonstration of a point which is falsifiable. The drain theory, even at its best, does not follow this basic rule because it's an unattainable task to ascertain whether the transactions between India and England were asymmetrical. Much of the shortcomings of the British Raj, as (T. Roy 2019) argues, lay in its highly inefficient welfare state where it unwisely spent the government revenue (mobilised by taxing peasants) on protectionist policies back home instead of developmental programs in India. As a result, the businesses came out as the winners while the rural poor and the women remained in a state of destitute and even got worse off than before. The evidence for deindustrialisation, on the other hand, is more convincing, though not without several limitations. There were multiple different regional experiences, each with a specific cause and effect relationship and time period. Amiya Kumar Bagchi and Indrajit Ray, for instance, have made compelling arguments for the case of Gangetic Bihar and Bengal respectively. Consequently, it's perhaps unreasonable to employ the concept of deindustrialisation as a universal experience faced by India in any meaningful way.

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