State Capacity and the Economic History of Colonial India

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Abstract

The paper re-examines the role of the state in economic change in colonial India (1757-1947), by paying attention to fiscal capacity. This capacity was larger than that of the precolonial states, and based on different foundations, such as centralization of finance and securitization of public debt. Nevertheless, the effort to raise finance hit a barrier, which had owed to the separation of debt from revenue operations. Did the barrier matter? By keeping markets open, the colonial state served private enterprise, but its failure to sustain growth in fiscal capacity compromised public investment in infrastructure and social development.

Keywords: Colonialism, state capacity, British Empire, economic development

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INTRODUCTION

In several of his most influential books, historian C.A. Bayly explored what was different and what was traditional in the making of the East India Company's state in India from the late eighteenth century until the mutiny (1857-8). In ideology, political alliances, and institutional strategy, this was a 'part-Oriental and part-European state' (Bayly, 1988: 106; see also Bayly, 1989). Indeed, there were overlaps between the precolonial and colonial states, evident in informal alliances between the Company officers and Indian bankers and merchants, incorporation of Indian legal precepts into a new *lex loci*, continued power and authority of some landholders, employment of communities of scribes formerly employed in local courts in the new bureaucracy, continued dependence of the fiscal system on land revenue, and an ideology of rule that acknowledged Indian theory and practice of statecraft.[2] Questioning continuity, new writings in the field suggest the Company state achieved greater centralisation of fiscal authority than before, created a standing army, disarmed warlords and mercenaries, changed the contract between the warlords and the state from a military one to one based on private property, formed more credible military alliances than their rivals, legislated heavily to shape the institutions of capitalism, and in consequence of some of these steps, enlarged the fiscal capacity of the state.[3]

This difference of opinion matters for the economic historian of India. The continuity approach implies that the political will to intervene in the economy was limited. In that vein, it has been said that after the great mutiny, the colonial state 'lost energy,' took a passive stance, while sharing power with indigenous (mainly landed) elite.[4] In other words, the state

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[2] I use the term 'Company State' to mean the government of the East India Company's territory in India during 1765-1857. The term 'colonial state' or 'colonial India' includes this time span as well as that of the government of India under Crown rule (1858-1947).

[3] For examples of works that emphasize discontinuity, see Roy (2013), Oak and Swamy (2012).

[4] The mutiny shifted the emphasis of social policy from reform to conservatism, leading to 'a post mutiny loss of energy,' Klein (2000), p. 549.

became too conservative and the conservative impulse came from a desire to keep peace with communities and the princes. The discontinuity approach implies British India was more willing to intervene in the economy and adjust its capacity to act accordingly. If the second approach is accepted, a question arises. What factors shaped the capacity to act?

The economic history of European colonial rule does not satisfactorily answer the question. Until recently, economic historians have studied the legacy of European colonial rule in Asia and Africa mainly with reference to metropolitan designs, intentions, and ideology. Common terms used to characterise the colonial state imply simultaneously the aims of the state and the long-term effects of the rule. Such terms include, for example, 'predatory', 'laissez-faire', 'liberal', 'night-watchman', and 'extractive'.[5] Attributing an aim to a colonial state and to infer economic change on that basis is not a persuasive approach for three reasons. First, it does not answer whether the regime represented continuity or discontinuity, for 'extractive' or 'laissez-faire' could apply to the economic policy of the indigenous states as well.[6] Second, for most colonies, a template of intention in the form of a declared statement does not exist. When it comes to evidence-based history, any one of these terms is as good as any other. Third, the intention-based approach is static, and does not allow the state to have adaptive capacity.

More promising is a cluster of recent works that concentrates on the capacity of the colonial states, implicitly assuming that intention was constrained by capacity anyway. The new economic history of colonialism has parallels with an older literature that explores the emergence of fiscal states in early modern Europe.[7] The fiscal state literature claims that expansionist states and the growth of capitalism were mutually dependent processes, and

[5] On the use of these terms to discuss the goals of colonial states, see Kumar (1998), Morris (1963), Acemoglu, Johnson and Robinson (2001), Kohli (2004).
[6] Not only was Mughal taxation 'oppressive' for the peasantry, 'oppression increased with the passage of time', Habib (1999: 371).
[7] For example, Bonney, ed. (2000). For a fuller discussion, see next section.

together account for Europe’s economic emergence. Although their geographical focus differs, contributions to the capacity-based approach to the state ask what makes states grow, and define state capacity as fiscal capacity (for example refer to: Gardner (2012), Frankema (2011), Frankema and van Waijenburg (2013), Booth (2007), Accominotti, Flandreau, and Rezzik (2011), de Roo (2017). This approach is useful because public finance data are easier to compare across time than many other types of economic data, and a closer look at public finance can suggest ways to test Bayly’s (1988) conjecture.

This paper studies the colonial regime as a fiscal state and attempts to develop a concept of the state that fits the facts of economic history. I compare colonial with precolonial regimes, India with Britain, to answer two questions: Did this regime represent a new type of state? Does the concept of the state explain the stylised facts of economic history better? I show that by two benchmarks, fiscal centralisation and public debt operations, British India represented a break from the past. However, debt operations, by tying Indian finance to British capital markets, made sustaining capacity growth politically difficult. The regime was constrained, not by fear of indigenous elite or conservatism, but by the contradictory nature of public finance. It could produce significant transformative effects in those activities where the state needed to provide indirect support but failed to make a difference in areas where the state needed to make budgetary commitments.

In several fields, the achievements of the colonial government was impressive. For example, the Company administration created an effective military machine. During Crown rule, railways and canal construction were added to these priorities. Defence capability, advances in mass transportation, and the new agricultural frontier contributed to market integration, a trade boom, and industrialisation. In some other ways, the small size of state suppressed the economy’s capacity to grow. For example, the infrastructure drive weakened in the interwar years. Agriculture in the tropical climate needed irrigation of a type (deep wells or canals) that private investment could not easily supply, and public investment provided to a small extent. A rich scholarship explores the effects of India's social diversity and hierarchy upon development of education, and shows that diversity affected schooling adversely (Chaudhary, Musacchio, Nafziger, and Yan (2012); Chaudhary and Garg (2015); Chaudhary (2016)). Mass education was another field where the state needed to make larger financial commitment and intervene directly.

The rest of the paper has four sections. The next section discusses the two literatures on state capacity that form the backdrop to this paper and suggests how these contribute to the project. The sections that follow consider evidence on the construction of a fiscal state. The fourth section interprets the economic legacies of the colonial regime.

STATE CAPACITY IN COMPARATIVE ECONOMIC HISTORY

The emergence of modern states is a puzzle. Small states (with a revenue-GDP ratio low by modern standards) with limited access to military resources and information on taxable capacity, must share sovereign powers with princes and warlords, and depend on cheap but politically sensitive taxes such as land taxes. It is these dependencies that also keep them small. In principle they can break out of the cycle by centralising military power, aided by warfare, and raising public debt. Once they gain the capacity to introduce information-intensive taxes such as income taxes, a virtuous cycle starts.

This stylised story of state emergence has been influential. Fiscal state refers to a state that manages to establish institutions that can deliver self-sustained growth in state capacity. In Western Europe, the region on which Joseph Schumpeter and some of his contemporaries based their influential analysis of transition in fiscal regimes, the flexibility to grow entailed expansion of tax base, increasing capacity to borrow or securitise public debt, and centralisation of the fiscal system (see discussion in O'Brien, 2011). The institutions in question involved the financial market, institutional changes to enhance the state's coercive capacity, assertion of the right to tax, and the bureaucracy, though none of these things changed in a smooth trajectory, without resistance or risk.[8] A particular source of risk was that the driver of regime shift was expenditure on war (Bonney, ed., 2000: 161). [9]

The 'memorable alliance,' as Max Weber called it, 'between rising states and the sought-after and privileged capitalist powers' was a feature of 'modern capitalism' (Cited in Ingham, 2003: 305)[10] Starting from another point, Schumpeter attributed 'the rise' of capitalism to 'the development of the law and practice of negotiable paper and of 'created' deposits,' a process that relied on state power to sanction commercial law as the law of the land, and in specific cases, on the existence of central banks (Cited in Ingham, 2003: 302). New institutional economic history too links state formation to financial market formation. States that are strong yet accountable should create conditions for financial development (North and Weingast, 1989).[11] Despite the risks of the process and its historical connections with warfare, economic historians see in this alliance conditions favourable for Smithian growth.

Within the recent great divergence debate, which explores the origins of world economic inequality since 1800, Weber's analysis of the modern state has been reaffirmed by historians who emphasise the role of interventionist and expansionist states in Europe's economic emergence (discussed in Vries, 2015). Those who consider this to be a piece of the

[8] Public debt carries risks, including the risk of distributive conflicts or fiscal conflicts, which are heightened when repayment entails imposing regressive taxes, and the risk of sovereign bankruptcy during wars and imperial expansion. For discussion, see Ferguson (2012).
[9] See also on successes and failures in overcoming risks, He (2013).
[10] The example was the Bank of England that directly served the state, and indirectly, induced expansion in the capacity of the banking system. Global historians often cite and discuss this sentence-segment from Weber's *Economy and Society*. For example, Chase-Dunn (1998: 135); Arrighi (1994: 12).
[11] Critics read seventeenth century England, the example, differently, though the intuition that strong states can foster capitalism is usually not questioned. See Sussman and Yafeh (2006), Coffman, Leonard, and Neal, eds. (2013), O'Brien (2011). For a critique that reads the link between power and capitalism differently, see Epstein (2002).

divergence puzzle insist that Britain's fiscal enterprise followed different goals, used different instruments, and produced different outcomes from, say, those in the Qing empire. The argument raises the question whether state-building in the European colonies was qualitatively dissimilar from that in Europe, and if so, why.

State capacity is also the focus of a subfield in the economic history of colonial empires. In common with the former perspective, contributors to this stream of thought define state capacity as fiscal capacity, explore the institutional and political foundations or the building blocks of colonial states, and come to similar conclusions about state-making irrespective of which European power ruled the colony. Colonial empires followed, and in the French African case struggled to follow, the rule that the colony would pay for itself. This rule made expansion of the state dependent on its capacity to raise local resources. This capacity was limited everywhere. Taxation remained at best an area of very limited success (Gardner, 2012; Frankema, 2011). A variety of local constraints were the more decisive influence than metropolitan agenda behind taxation projects, such that, under similar local conditions, the French and the British operated in similar ways (Frankema and van Waijenburg, 2013, 25-6). Surveying the efforts by Southeast Asian states to make developmental expenditure, Booth (2007) concludes that the intention to do more for welfare was constrained by cautious taxation policies and limited taxable capacity.[12]

On the question why the taxable capacity stayed modest, the historiography of colonial empires turns speculative. One set of explanations emphasises indirect rule, shared sovereignty, class power, and alliances with the indigenous elite, suggesting limits to which the colonial state could go to tax its partners (Kumar, 1983). Another option is to cite

[12] A study of late-eighteenth century Spanish America shows that metropolitan interference and agency in running the colonies were limited and took the form of 'co-optation' of the local elite through credit relations and other indirect means. The authors call this neither direct rule nor indirect rule, but a regime where the colonists and the settlers were stakeholders. Grafe and Irigoin (2012).

dependence on inflexible heads of revenue, land or tax departments for example, and limited progress in levying income and wealth taxes. Politics could again be a reason behind the reluctance to use income taxes, but there was another one. These taxes were more information-intensive, had no precedence, and would demand more administrative penetration. Even in such a plainly predatory setup as the Congo Free State, demography and geography forced the tax system to stay 'minimalistic' (de Roo, 2017, 97). In West Africa, minimalism would mean reliance on trade taxes. Cooper (2002) calls states like these, which had limited penetration into the interior and were forced to operate from the coasts, gatekeepers. Trade taxes could hurt both parties because colonies often traded a lot with the home country. Further, trade taxes were almost ruled out within the British Empire because it functioned like a giant customs union.

The solution, it may seem, was debt. Despite limited success of the taxation project, the similarities between colonial states and European fiscal states are remarkable. In both cases, warfare and the threat of rebellion spurred reforms in public finance. Financial markets and securitisation of public debt are areas of emphasis in the colonial public finance literature too. Colonies broadly speaking had privileged access to metropolitan capital markets. That is, they could borrow more easily, for 'the effect of empire was ... to remove the default risk altogether', and more cheaply when compared with the indigenous money market (Accominotti, Flandreau, and Rezzik, 2011, 399). Work on sovereign debt in poorer but independent countries shows that independence did not constitute a strength in capital markets in the early twentieth century. In fact, for such countries, the process of contracting debt entailed either high cost or a partial loss of sovereignty (Tunçer, 2015). Nor did being a colony automatically deliver access to cheap metropolitan capital; such access required the states to take 'a variety of measures to ensure that their colonies could borrow' (Gardner, 2017, 254). But imperial dominions had better chance. The evolution of British India reveals the significance of both centralisation of finance and dependence on debt.

THE EAST INDIA COMPANY STATE AS A FISCAL PROJECT

The British Empire in India came into being through the actions of the East India Company. We cannot be sure what aims the Company served at the time of the emergence of the new state – whether mainly defensive or aggressive, mainly political or commercial. Answers to these questions depends on whether we see this entity as more like a firm or more like a political body, and this issue remains unresolved.[13] Whatever it was, the regime when it began in Bengal in 1757-65, was one of the weaker ones in the divided political landscape of post-Mughal India. It did not yet have a large land army. The Maratha domain was stronger militarily and richer fiscally. The Company fielded a smaller army than its enemies and rivals in almost every consequential battle until the nineteenth century. Being a merchant firm and European, its officers were not natural allies of the local landlords who collected taxes and controlled landed property. From this shaky foundation, the regime gained strength by building a standing army, and rewriting the contract between the state and landlords, which transformed them into demilitarised proprietors of land.

This was fundamentally a fiscal project. The innovative element of the project can be seen when we compare colonial India with its most powerful predecessor on two benchmarks of fiscal modernisation discussed earlier, centralisation and securitisation. There can be three measures of centralisation of public finances, the proportion of revenue collection to

[13] Stern (2011) claims the Company was fundamentally a political entity. Roy (2012) stresses the economic imperatives. Both these approaches can lead us to conclude that its actions could have political consequences of the kind that transpired in the late eighteenth century.

assignment, the proportion allocated between central and provincial revenue, and the proportion between the expected revenue that could be reliably measured and was certain to be collected and expected revenue that was uncertain to be collected in full.

The first one of these indices measures the ratio of what was collected by the state to what was retained as salary assignments. The Mughal fiscal system was characterised by 'surprising degree of systematised centralisation' (Habib, 2003: 102).[14] The system, however, was differentiated. It contained layers that differed on the quality of the data, potential cost of collection, mode of collection, and the level of assessment. The fiscal capacity of the central treasury depended on this composition, which is subject to an ongoing debate (Guha, 2015). Capacity also depended on the centre's control over salary assignments, control being exercised, by, among other things, frequent reallocation of assignments. These assignments implied contractual lease of functions of the state, rather than bureaucratic employment, and to that extent, they represented sharing of sovereign authority. The degree of control was certainly variable. In times of wars and rebellion, the state could lose control over allocation of functions. According to Richards (1995: 76), who produced the most systematic overview of the Mughal public finances, 24-33 per cent of the total revenue ('effective jama' in his words) in 1595 came from crown lands, which the imperial establishments lived on. 'All remaining revenues were shunted directly to the holders of salary assignments' (Richards, 1981: 77). Since salary assignments were abolished by the Company, barring some merit-based assignments, in effect the proportion was nearer one hundred per cent in the early nineteenth century. And although early British rule preserved some tax-free land grants, these did not carry the same meaning as assignments did in earlier times and were reduced over time.

[14] In the analysis of the Mughal system, I follow Richards (1995) rather that Habib (1999), who produced the first systematic account of the system. Though their sources do not differ, Richards offers generalisations that are useful for a comparative history.

The centre-province revenue ratio would measure, roughly, the extent to which military power was geographically concentrated in the centre, that is, measure how effectively fiscal capacity translated into the ability to contain the threat of internal rebellion. Around 1600, the ratio would follow the collection-assignment ratio closely and should be between 1:3 and 1:4. British Indian fiscal data collected from Statistical Abstracts suggest that it was approximately 1:1 or smaller in the third quarter of the nineteenth century. By then, the regions did not contribute to the military enterprise anyway.

The main source of revenue in both regimes was land. Degree of control over land revenue depended on the extent of knowledge of what was taxable, and in turn, on measurement of taxable gross output. ‘The ratio of zabt to unmeasured lands,’ Richards (1995: 189) writes, ‘serves as a plausible index of *imperial centralisation*’ (emphasis added). The zabt were the recorded or regulated land from which revenue was collected. The act of assessment for the purposes of tax collection would imply administrative penetration in the village production and record-keeping system, and formally or informally, the conversion of local notables into functionary subjects. Unmeasured land in the above citation was not tax-free, but paid revenue as tribute or in a lump sum. The costs of measurement and enforcement were, by implication, relatively high in regions that paid revenue in this way. Comprehensive measurements did not happen often, we know of one around 1595, and another around 1700. Both were incomplete and partial. The 1700 survey suggests that 80-90 per cent of land was assessed in the heart of the Mughal Empire, around Delhi and Agra. Plausibly, the ratio was considerably lower in the provinces that were not part of the assessment (confined in this case to the eastern half of the Indo-Gangetic Basin), and in the uplands and arid zones. The area covered by detailed cadastral data formed roughly a third of the land mass thought to be included in the Empire around 1700. Colonial revenue assessments in the eighteenth century had limited coverage and persisted for some time with tribute-tax combination. But by 1880, coverage of cadastral surveys was complete, and the tribute component disappeared.

Did increasing state control over the fiscal system enable the state to grow bigger? Simple measures of state size would be the revenue share in Gross Domestic Product (GDP) and revenue per capita. I assume that the silver rupee is comparable across time. The Mughal silver rupee was a coin of 96 per cent purity. It weighed 178-180 grains of silver or 11 grams (Prakash 1988, 477). This ratio is assumed to hold steady until 1900 (http://gpih.ucdavis.edu/Datafilelist.htm (accessed on 20 March 2018). In other words, when converted into the silver rupee estimates of revenue should be comparable across time. On GDP in 1600, we have a range rather than a precise number. Moosvi (2015) estimates the GDP of India in 1600 at 25 billion dams or 625 million rupees. Broadberry et al (2015) suggests a probable GDP in 1600 that should be higher than this figure. Moosvi's (2015) data on revenue is reworked by Richards (1995) to suggest an effective revenue of the Mughal Empire at 99 million rupees (the Broadberry et al (2015) estimate of 145 million is based on an older estimate of revenue taken from Irfan Habib's work). According to Moosvi (2015), in 1600 the tax-GDP ratio was more than 15 per cent, a proportion that might suggest an extractive state, since not a lot of this money went to funding investment and infrastructure. Combining Richards (1995) with Broadberry et al (2015), the tax-GDP ratio would be less than five per cent, not much different from the colonial Indian record. The latter article estimates that real GDP in agriculture increased by three per cent between 1600 and 1700. Richards (1995) considers the income originating in the Empire to have doubled, since revenue collection about doubled between the rules of Akbar (1556-1605) and Aurangzeb (1658-1707).[15]

[15] Broadberry et al (2015) suggests a 250 per cent increase in prices between 1600 and 1700, Subrahmanyam (1994: 209) thinks that 'price inflation was at best sporadic' in the seventeenth century.

[TABLE 1 HERE]

The narrative that is more relevant for this paper does not require us to select from GDP measures. Broadberry et al's (2015) figures of revenue collected over time are sufficient for that purpose. They arrive at the conclusion that in money as well as in real terms, collection by the centre fell in the eighteenth century. According to their measurements, real revenue collection in 1766 was as low as six per cent of what it was in 1600, suggesting an extraordinary attrition of state capacity (or missing data, which indirectly points at the same conclusion). After 1766, there was a recovery, and by 1871, real collection was slightly above the 1600 level. The colonial state, in short, did expand in size, if only marginally when we compare 1871 with 1600. Both the Mughal and British Empires wrested state capacity from warlords, and the successor states like the Marathas lost capacity, if this U-shaped trend holds (Roy, 2013). We should conclude that British India centralised finances somewhat more successfully than the pre-eighteenth-century regimes, and dramatically more successfully in comparison with the eighteenth-century ones.

That the revenue per head was comparatively low in Mughal India is already established in economic history. Tax per head in grams of silver in India was half that of England in 1670, and one-twentieth that of England in 1851 (Karaman and Pamuk, 2010). Revenue per head stayed low in British India, while it rose sharply in England.

A second area of innovation was public debt. Raising public finances by sale of securities of long duration was an innovation the British had experience in before their Indian rule began (Dickson, 1967). To quote Richards (1995: 68), the Mughals obtained their revenues from 'plunder, tribute, and taxation.' Their budgets had a current account. 'Akbar's advisers did not have to overcome budget deficits' (Richards, 1995: 75). Revenues grew by territorial expansion. 'Plunder from victory swelled the imperial reserves.' Military conquest 'repaid the costs' (Ibid.). When there was peace, 'additional taxes levied' raised extra money. This was a redistributive fiscal system, a 'tax state' as Europeanists like Schumpeter called it and had no inherent flexibility to grow without wars and conquest of territory (see discussion of Schumpeter above).

The Mughal cities had banking firms financing trade, and sometimes funding the temporary deficits of office-holders. But bankers' capital did not play a systematic role in public finances. Leonard (1979) suggests the withdrawal of credit by large banking firms hastened Mughal collapse. Richards (1981) criticised this thesis on the weakness of evidence, either from banking firms, or on balance sheets. It is indeed possible that the bankers' main clients were the local salary assignment holders rather than the imperial state, in which case, evidence would be difficult to find. No matter the scale of these transactions, there is little evidence of securitisation of government debt at any time before the mid-nineteenth century.

For much of the eighteenth century, the Company ran a similar arrangement in India, that is, deals between bankers and the state were localised rather than being mediated by the central budget. Still, the Company, being a merchant firm, was readier to borrow, and was probably a more credible debtor than most indigenous debtors. Securitisation of debt was a legacy of the Anglo-French wars at the turn of the nineteenth century. Before that, the Company borrowed little, and when it did, it relied on Indian bankers for temporary loans. Debt volume began to rise from around 1800. A game-changer was the Burma war (1824-26), when the Company floated a large loan. Peers (1989) shows that the loan, which carried a low interest rate by both Indian standards and the Company's own past standard, still did well. This was a new development because a loan of such size was taken by the public rather than by bankers. The government sold securities, which expatriate Europeans and wealthy Indians bought. During the mutiny (1857-8), 90 per cent of the debt stock was held within India in this way.

Soon after the mutiny, the prospect of collecting more taxes from land started to recede. The effects of the first reform, the centralisation of finances realised by the Company, were wearing off. Public debt now began to play a larger role.

STATE CAPACITY AND CROWN RULE (1858-1947)

Although it retracted from land taxes, there is little evidence that the state retracted into a conservative stance after 1857. A measure of conservatism is the state's ability to make laws. In the sphere of law, there was an attempt to maintain older property rights. But there was a clean break with tradition in commercial law, procedural law, codification, and the system of justice (Roy and Swamy, 2016). Legislative activity in the late nineteenth century, in fact, accelerated, with a new series of laws restraining the power of landlords and wealthy rural classes. In most regions land tax was collected from the peasants, and in those regions where it was collected from the landlords, the latter's ability to extort the peasants was in decline, partly reduced by legislative means. The legal system showed signs of strain, not because of legislative inertia, but because the state had made too little investment in the legal infrastructure consisting of courts, judges, and enforcement.

After the mutiny, as British capital started flowing into the railways, the government found it easier to raise capital in London. Thereafter, London's share of capital investment rose rapidly. During the period, Indian stocks carried a lower interest rate in London than in India, which justified the shift. The relative position of London changed only when the Reserve Bank of India was established in 1935. Thereafter, the volume of securities traded in India rose again. For most of these intervening years, the colonial government managed to keep debt within stable limits. The debt/GDP ratio was modest, and below the average for pre-war Britain. In keeping with rise in prices, and nominal expenditure, debt per person registered an increase in the long run stock per head between 1870 and 1920 (Table 2). Until that point, government debt, which was mainly contracted in Britain, was not a crucial instrument either to meet a current deficit or to finance capital expenditure. Moreover, in most years, the government earned surplus revenue.

The process, however, hit a barrier. Fiscal capacity in relation to the size of the economy and population rose until about 1880 and started to fall thereafter (Table 3). The trend was reversed temporarily late in the interwar period (an accounting effect of the Great Depression, and increased reliance on trade taxes), but the ratio did not return to the nineteenth century level. After 1870, British revenue grew faster than Indian because British economic growth was faster. From the 1890s until World War II, the revenue/GDP ratio rose more than three times in Britain (from seven to 25 per cent) while in India it did not move away from the already low level of about six per cent. The suggestion that a 'British tradition of conservative finance' was behind the Indian record, is not persuasive because Britain did not apply the same rule to itself (Thomas, 1939: 430). There was something distinctly colonial about Indian finances. The state's failure to sustain growth left it as one of the smallest states within the British Empire at its end in 1947 (Frankema, 2011).

The deceleration in state capacity is an unsolved puzzle in Indian economic history. The historiography of colonial budgets does not identify the shift. Major contributions in the field do observe some changes in the budget-making process but these were more in the nature of house-keeping, such as adjustments in provincial contracts (Kumar, 1983). Contemporary accounts as reported or cited in analytical history do not hint at a shift in fiscal ideology. Indeed, in Thomas' (1939: 249) authoritative account he states, 'a period of financial prosperity dawned on India' following the silver crisis and depreciation of the silver rupee during 1885-1895. In fact, there was a change for the worse. It is possible that the government, worried about its ability to raise taxes, decided to curb net debt accumulation. However, we do not have direct evidence to suggest that the administration connected current debt inflow and future repayment capacity in this way.

[TABLE 2 HERE]

[TABLE 3 HERE]

There can be two explanations for this reversal. First, it is well known that the depression in silver put pressure on the budget that contained a significant remittance element. However, silver deflation did not begin on a serious scale until the early-1890s, and by then the reversal in fiscal capacity had begun. The second reason is that public debt involved a mechanism that worked against its expansion or overuse. Table 3 shows that from about 1880, the debt-GDP ratio became stable at about 23-24 per cent. This stability is directly and causally related to the slowdown in growth of the state itself. By then, the mainstay of revenues, land tax, was in decline by every benchmark. Trade taxes were of limited value. Commodity taxes did not compensate for the loss of other revenues, the most lucrative of these, opium, was also in decline. Given a relatively low debt-GDP ratio, one would expect that the government would expand by using public debt, instead it used this instrument more cautiously than ever. Why was that the case?

After 1858 Colonial India was a government with three heads. One of its heads was at the India Office in London, which managed currency value, currency reserves, and security market operations. The second was the Viceroy's office and council of advisors in India, which managed the fiscal system. The third was in the provinces, which oversaw spending on such essential public goods like healthcare and education. The India Office was the dominant partner for most of these years, because of its role as unofficial broker in the London securities market from which the colonial government borrowed until World War I (Sunderland, 2013). The burden of debt as we have seen was kept relatively low.

The reason it was low was that a larger debt service put pressure on the currency, which would be unpalatable to the administration. A larger debt service was also unpalatable to Indian critics of the policy, who believed that 'the biggest part of the drain arose on account of interest in borrowed capital' (Chandra, 1960: 678).[16] 'The chief cause of India's poverty, misery, and all material evils,' wrote the most influential critic of the fiscal system in the late-nineteenth century is, 'the burden of a large amount a year to be paid to *foreign* countries for interest on the public debt, which is chiefly caused by the British rule' (Naoroji, 1901: 141, emphasis in original).

Had the government borrowed more in India, it would have reduced the currency and political risks while growing more freely without the fear of affecting trade. Why did it not take that road? The immediate answer is that the Indian money market was expensive and borrowing in India would have imposed serious strains on the budget. There was robust growth of corporate banking in India after 1860. Bank deposit as a proportion of GDP increased from less than one per cent in 1870 to 12 per cent in 1935. The expansion of public debt, joint-stock banking, banking law, growth of credit, and urbanisation, however, left the cost of capital high and almost unchanged. Provincial Banking Enquiry data suggest that in the 1920s, inland bankers of India charged at rates like 12-18 for commercial loans.

[16] The 'Drain' refers to net factor payments abroad, which was usually positive. The 'drain theory' of Indian poverty refers to the two assumptions that these payments occurred at the expense of potential saving and investment in the domestic economy, and that domestic investment would deliver a higher contribution to national output than the services that the money paid for. The theory was controversial for these assumptions that could not be tested. On the controversy, see Balachandran (2003).

Borrowing at such rates would bankrupt most businesses. There is little evidence that the cost of capital fell in response to institutional changes (Roy, 2018).

The deeper explanation would have to analyse what these financial institutions were doing. The money market was expensive because the main economic activity, agriculture, where nearly all the short-term finance went every year, was a highly seasonal activity. The tropical monsoon climate created a short cultivation season and a long slack season. The conduct of agriculture in these conditions was marked by extreme seasonal fluctuations in demand for money. Loans needed to be advanced to a vast army of local merchants suddenly, for short periods, among clients who were located far away from banks and discounting facilities, and who were illiterate. Negotiable instruments would not work in this system, only money would. Therefore, money rates rose to astronomical levels during the busy season (November-March), and since money was hoarded during the slack months in readiness for the busy season, little was available for long-term non-agricultural uses (Roy, 2016). This structural feature of the Indian money market reinforced the position of the India Office as money manager, increased reliance of the colonial government on the London money market, added currency risk to any innovation in the budget, and thus weighed against budget innovations. In the long run, the more colonial India relied on the London money market, the more cautious it needed to be about public debt.

The slowdown in fiscal capacity matured into a crisis in the 1920s and 1930s, when the revenue surplus disappeared, and the government found it increasingly difficult to meet its obligations to Britain from the budget. Net increases in liability to meet public investment rose from an average of 10 per cent of investment in the pre-war period to 35 per cent during the interwar period. Following the Great Depression there occurred a controversial episode of monetary management, as the India Office refused a currency depreciation fearing the government would fail to meet its obligatory payments to Britain if it did so. The resultant fall in trade and prices made the government face a short-fall in its domestic obligations. As British India stared at bankruptcy, its stocks were less attractive in London, and indeed failed to attract buyers on some occasions. The 1930s crisis did not owe as much to a fall in revenues raised in India as to the government's reduced ability to raise credit in London. The general depression in prices in the mid-1930s in fact increased the level of collection of revenues in India at constant prices. Credit however, was another matter.

The discussion so far has been about the federal state. But, as mentioned earlier, the responsibility for crucial welfare expenditure fell upon the provinces, and in turn, the local authorities. How well could they perform this duty? Crown rule intoduced the system of elected local bodies – District Boards, municipalities and corporations – to manage schools, and allowed them to raise certain types of taxes. Reports in the early twentieth century commented on the financial weakness and small administrative capacity of the Boards. These authorities had no authority to borrow, relying almost entirely on grants-in-aid. They also suffered from administrative inefficiency and 'extraordinary indifference,' especially in the matter of education (India, 1908: 67, 111). Evidence collected by the 1908 Decentralization Commission revealed that the local bodies were too demoralised to demand more power and disinterested in expanding the scope of their activity. They ran on the energy of individual leaders. What legacies might a small yet globally connected state produce?

LEGACIES

The question of legacy induces us to study expenditures. The story is a simple one. In the early nineteenth century from one third to half of current revenues went into defence. The proportion fell later, but was still large. The British Indian army was effectively the British army. Debt service and net debt flow were directly linked with public investment in infrastructure such as roads, canals, and profit guarantee offered to private railways. As debt flow dropped, so did the infrastructure drive. What was left was spent on general administration and social welfare, such as famine relief, healthcare, and education. This was a small share of the budget (Table 4).

Colonial India was far from a stagnant economy. In three areas there was revolutionary change with an almost doubling of the cultivated land frontier between 1800 and 1920 thanks to canal construction, a nearly one hundred-fold growth of long-distance trade between 1870 and 1940, and the emergence of the world's fourth largest cotton textile mill industry in Bombay and Ahmedabad. The three main port cities of South Asia, Bombay, Calcutta, and Madras, were sites of industrialisation, nodes of Indian Ocean trade, and homes to large settlements of wealthy Indian merchants such as the Parsis, who recycled a part of their profits to invest in public goods and modern education. The defence capacity of the regime protected the giant integrated market place the Empire had created. This benefit was visible to many contemporaries, including the Indian diaspora merchants (Roy, 2018). Table 5 reports growth in real national income by dividing the economy of late-colonial India into three parts – peasant cultivation, government, and private industry and services. The figures reveal a divergence within India between peasant agriculture on the one hand, where growth was small overall, and near-zero when adjusted for population growth, and businesses on the other hand, where growth was significant, and when adjusted for working population, showed evidence of substantial productivity gains (Figure 1). Table 5 extends twentieth century data backward to show when the divergence may have begun (about 1880).

Budgetary commitment was not necessary to promote industry and trade. The persistently high cost of capital depressed agricultural investment, but it favoured communities with access to liquid wealth, and expatriates who could access the British money market, to make extraordinary gains. Private capital of merchants and bankers gained from the open economy that the Empire was keen to maintain, insofar as they benefited from trade or were able to access capital and labour from abroad. The volume of long-distance trade in India grew significantly (Table 6).[17] The government facilitated that process by maintaining open borders to both trade and factor market transactions, enabling railway construction, and creating a giant customs union within the Empire. Aided by this open environment, business growth sustained itself. Between 1870 and 1940, the port cities and their satellites had been linked to the agricultural interior by railways and telegraph. They shipped abroad huge quantity of cotton, grain, seeds, indigo, and opium, and imported British textiles, machinery, metals, and chemicals from Germany and Belgium. These cities experienced an influx of foreign workers that were employed in firms and factories. Merchant firms engaged in businesses consisting of Indian, European, and Indo-European firms, and they usually had branches in several cities within India, and sometimes in Southeast and East Asia, and even Europe. Profits from trade were invested in large-scale mechanised factories, especially cotton and jute textiles, plantations, mining, and banking. India led the contemporary developing world in two leading industries of the industrial revolution, cotton textiles and iron and steel. In 1928, 48 per cent of the cotton spindles installed outside Europe, North America and Japan were in India (Dunn and Hardy, 1931: 25). In 1935, 50 per cent of the steel produced outside Europe, North America and Japan was produced in India (BKS, 1950: 265-74).

[TABLE 4 HERE]

[TABLE 5 HERE]

[TABLE 6 HERE]

[17] This set of figures combines the volume of goods passing through the major ports around 1800 (Roy, 2012) with the volume of goods carried by the railways and ports in 1940 (India, 1939: 712). The extent of the growth will be tempered by the quantity of trade lost – or gained – due to decline in overland trade and river-borne trade, because of the railways and ships. We do not know enough on these figures, nor on whether these systems were substitutes of or complementary to the railways and ships.

[FIGURE 1 HERE]

Against this dynamism, there were areas of deep inertia. When colonial rule ended, despite land extension, peasants and manual labourers who formed most of the employed population earned no more than a bare subsistence, and sometimes less than that. The administration prided itself on looking after the interests of the peasants, and for playing the part of 'an improving proprietor on an enormous scale' (William Hunter cited in Thomas, 1939: 7). 'The Government of India,' wrote Lord Mayo, Viceroy between 1867 and 1872, '… is the chief landlord. The duties which in England are performed by a good landlord fall in India .. upon the Government' (cited in Thomas, 1939: 7). National income statistics reveal the belief that the government was performing this role successfully was no more than a reassuring myth, albeit one which the rulers believed in. The government knew irrigation investment was needed for improvement in a tropical geography, but it could make little budgetary commitment to this cause.

Investment rates remained small overall. Rates of private investment in business sectors (outside agriculture) were 2-3 per cent of national income between 1901 and 1930. Investment rates in agriculture were less than one per cent. Rates of public investment, crucial for infrastructure, agriculture, and social development, were two per cent. The expenditure contributed to the construction of one of the largest railway networks in the world, and transformed irrigation infrastructure in major regions like the Punjab. But it was a short-lived drive. If we consider only net investment, that is creation of new assets, the public investment rate was declining. Depreciation accounted for about one-third of gross investment in the pre-war period, and over half of gross investment in the middle of the 1930s. The infrastructure drive that saw the creation of railway and irrigation systems, and in turn extension of the agricultural frontier, did not continue into the interwar period (Roy, 2011).

At the end of colonial rule, India had one of the world's highest levels of illiteracy and infant mortality. Expenditure on social overheads, such as schools and hospitals, are included in general administration. The money spent on these public goods was too small in per capita terms to induce a major change. The poor record of colonial India investment in universal healthcare and education stands in contrast to the impressive achievement in trade and industry. In 1933, the British government spent on average £2.4 per person on defence, and £4.5 per person on social welfare, including education. The Indian government spent £0.13 on defence and £0.05 on social welfare. Literacy rates, on average, were five per cent on the Indian subcontinent in 1900, and rose to 19 per cent in 1951 in the Indian Union. UNESCO (1957) data show that around 1950, India's illiteracy rate of 81 per cent was one of the highest in the world. Only a few regions, such as Haiti, Sarawak, North Borneo, and Portuguese Guinea, exceeded this level while parts of North Africa came close to it. The record in East and Southeast Asia excluding the regions mentioned was considerably better than India's. Infant mortality rate (IMR) was 200 per 1,000 live births in 1900, so India belonged in a set of countries with exceptionally high child mortality (Chandrasekhar, 1959). The IMR was influenced by the extent of famines and epidemic outbreaks of malaria, plague, cholera and influenza. Only after 1921, with a reduction in famines and more effective control of epidemic diseases, did IMR fall, reaching 146 in 1947. Nevertheless, this was still high compared to other Asian colonies such as the Philippines.

Educational development, however, varied enormously between communities and places. The historiography of education observes that the District Boards in charge of educational development in the countryside and small towns had a small impact on raising the level of expenditure on schools (Chaudhary and Garg, 2015). District boards managed primary schools indifferently, and were generally unable to invest in new ones. ‘Especially in regard to education,’ wrote Thomas (1939: 435), ‘local expenditure is a very important factor in most countries. This is not so in India.’ On the other hand, communities engaged in trade and industry in the port cities funded their own education sufficiently to improve outcomes. For example, the overall female literacy was near-zero in 1901, but was over one-third among the Parsi community in Bombay. The urban municipalities, which had the authority to tax rich citizens (on water, for example) and make businesses pay for rents and certain transactions, raised a lot more money per capita. For example, in 1930, municipalities and District Boards spent equal sums of money on education, but the ratio of school-going population living in their domains was roughly 1: 10 (Thomas, 1939: 10). Not surprisingly, in port cities like Bombay, Calcutta, and Madras, local entrepreneurs competed to take control of the local Board, which became a field for democratic contestations from the late nineteenth century. In the twentieth century, several prominent national politicians had had their apprenticeship in the local Boards.

Similar variations can be found in IMR too. Generally, IMR was higher in North and Central India relative to Eastern and Southern India. And the female IMR was higher than for males in the former regions. These facts suggest that more public investment would not have been a sufficient condition for improvement in education and health outcomes, because local economic as well as cultural factors were important too. That more public investment was a necessary condition cannot be disputed.

That an open and relatively deregulated market economy should generate such inequality is not surprising. The port cities and agricultural interior became more unequal in the process of the nineteenth century globalisation. Port cities not only earned more income per capita from business, but also had richer local administration that spent ten times more money per capita on schools. Public welfare expenditure could potentially bridge the gap by investing in schools, roads, hospitals, and agricultural resources and technology across the country. That the state did not do this, did not distribute opportunities more widely, and raise the money from Britain to do so, was a significant failure.

CONCLUSION

The paper argues that the economic history of colonial India confronts us with a paradoxical mix of enterprise and poverty, and the concept of the state needs to be consistent with that paradox.

What role did the state play in economic change in colonial India? A useful way to answer the question is to concentrate on fiscal capacity. The paper shows British India managed to raise fiscal capacity and retained the will to make institutional interventions via legislation. But the project lost momentum, and for the entire period limited the capacity to spend on public goods and infrastructure (including legal infrastructure to back up legislation). This pattern of engagement did not hurt private enterprise but disserved developmental investment.

There was a chronology to the effort to build capacity. Centralising finances and military operations mattered around 1800, whereas access to the London money market mattered more around 1900. The effort was modestly successful until the third quarter of the nineteenth century, but slowed thereafter. The slowdown cannot be attributed to an external shock, and owed instead to a built-in depressor in colonial public finance. The root of the depressor was a coordination problem between the two arms of the government, the Indian one that managed the current account of the budget and the London one that influenced the capital account.

This paper carries lessons for the comparative history of fiscal states. Discussions on the fiscal state in Europe implies that colonists and their colonies were different in the aims and institutions of governance, suggesting an explanation for the great divergence. The analysis also shows that in the aims and the instruments, Britain and India did not differ as much as we may think. In the late nineteenth century there was more similarities than differences between Britain's own state-making and that of colonial Indian. Some of the key institutional reforms underpinning the construction of a fiscal state in Western Europe – securitisation of public debt, centralisation of public finance, and the joint growth of coercive and financial capacity – was consolidated in India in the nineteenth century. A symbiotic dependence between states and capitalism was a feature in both Britain and India. Nevertheless, their dependence on the City of London had radically different political implications for the two countries. Having to minimise political risk that an expansion of public debt in London entailed, the state was unable to expand. Furthermore, London's control on debt denied India some of the externalities of growing public debt – negotiable paper, central bank, bank guarantee to instruments, and financial deepening – and made both public debt and monetary policy controversial, which shaped in the interwar period into a strong criticism of diarchic economic management.

Finally, the paper has some implications for the analysis of the postcolonial economic history in India. The postcolonial state erected barriers to openness, ended market-based cross-border financial flows, and enlarged the size of the state. In the process it continued to use public debt, while integrating the operation with fiscal policy by using the services of the central bank. The foundation of the fiscal system was a colonial legacy, but its effects were very different. The end of the open economy was damaging for macroeconomic stability as well as for capitalism. Agriculture was another matter. The experience of the Green Revolution in South Asia shows that the government is indeed needed as a partner in agricultural growth, because growth depends on expensive water projects in tropical monsoon climates. The post-Green-Revolution government not only invested in rural infrastructure but also subsidised farmers’ investment and consumption to a degree that would have been unthinkable in colonial India.

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Table 1. Long-range Income in Real and Money Terms

	GDP 1946-7 prices (b Rs)	Prices (1946-7 = 100)	Nominal GDP derived from previous columns (b Rs)
1600	22 (BCG)	9 (BCG)	2
1872	32 (H)	28 (MM)	9
1946	67 (H)	100 (MM)	67

Notes: BCG stands for Broadberry-Custodis-Gupta, H for Heston, and MM for Michelle McAlpin. See Broadberry et al (2015), Heston (1983), and McAlpin (1983).

Table 2. Public Debt Stock

	Debt/GDP (%)	Debt per head (m £)	Debt raised in UK (% of total debt stock)
1840		4.9	4.9
1850		7.4	7.3
1860		26.6	26.6
1870	14.9	34.8	34.8
1880	23.3	45.4	45.3
1890	24.4	54.7	54.7
1900	24.4	63.3	63.3
1910	22.4	65.9	65.9
1920	14.8	46.6	46.6
1930	38.4	52.0	52.0
1939	35.1	46.5	46.5

Table 3. Scale of fiscal system, India and Britain compared

	Indian Revenue per head as a ratio of British revenue per head (%)	Revenue, % of GDP, UK	Revenue, % of GDP, India	Revenue per head (£ at 1873 prices), India
1840	6.3			
1850	7.6			
1860	9.1			
1870	12.9	7.2	7.0	0.27
1880	14.5	7.2	10.5	0.38
1890	9.4	7.2	8.3	0.30
1900	6.8	8.5	7.5	0.26
1910	7.5	9.1	6.7	0.28
1920	6.7	19.5	4.8	0.20
1930	3.6	19.1	7.9	0.35
1939	2.1	24.5	8.3	0.42

Source: India, *Statistical Abstracts of British India*, Calcutta, various years; and The Bank of England's Three Centuries Macroeconomic Dataset, Version 2.3 - 30 June 2016, http://www.bankofengland.co.uk/research/Pages/onebank/threecenturies.aspx (accessed on 1 February 2017.

Table 4. Composition of Revenue and Expenditure 1840-1938 (percentage of total)

	Revenue		Expenditure		
	1840	1938		1874	1938
Land tax	62	13	Administration[b]	12	15
Salt and opium	17	5	Defence	26	22
Customs	6	27	Railways and irrigation	12	14
Income and excise	0	8	Debt service	9	7
Others	15	46[a]	Others[c]	39	42
Total	100	100	Total	100	100

a. Includes railway receipts.

b. Includes direct charges against revenue or cost of collection.

c. Includes pensions, government purchases, famine relief.

Source: India (1867, 1939).

Table 5. Domestic Product at 1946-7 Prices (billion Rs.)

Year	Agriculture	Government	Industry and services
1821	12.4	1.2	11.6
1871	16.5	1.7	13.5
1901	19.7	2.4	18.8
1941	24.4	3.4	37.1
Growth rates (annual per cent)			
1821-71	0.5		0.4
1871-1901	0.5		1.1
1901-41	0.4		1.7

Sources:

1821-1871: Broadberry et al (2015), Table 11 (Indian Real Output 1600-1871) used to convert 1871 Net Product figures from Heston (1983).

1871-1901: Heston (1983).

1901-1941: Sivasubramonian (2000)'s series of Real Net Output (1938-39 prices) converted into Heston's 1901 levels.

Table 6. Goods handled by ports and railways: 1841-1940 (million tons)

Decade	Cargo carried in three major ports (average annual)	Cargo carried by railways and three major ports (average annual)
1841-50	1.2	
1851-60	1.8	
1861-70	2.0	
1871-80	2.5	8.8
1881-90	3.5	22.3
1891-1900	4.1	36.5
1901-10	6.6	61.9
1911-20	6.9	90.4
1921-30	8.5	116.0
1931-40	9.4	108.7

Source: India, *Statistical Abstracts of British India*, Calcutta or Delhi: Government Press, various years.

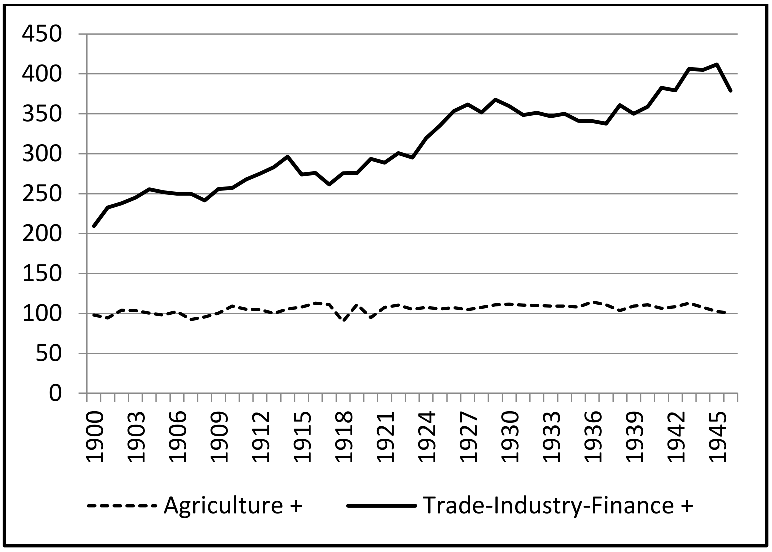

Figure 1. Net output per person (Rs. in 1938-9 prices)

Notes: Adapted from data in Sivasubramonian (2000). The figures combine British India and the princely states. Agriculture + includes other natural resource dependent occupations like fishery and pastoralism.