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Financial property rights under colonialism: some counterfactual possibilities

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Abstract. This article seeks to explain the lack of the development of contemporaneously 'modern' money and credit markets in the 18th to 19th century economy of India. Borrowing from the literature on property rights, it demonstrates that the emergence of 'modern', and state-connected money markets was the result of a certain kind of power relationship between rulers and financial capital holders where the two were forced to mutually cooperate; financial systems represented the institutionalization of this mutual cooperation. Specific kinds of 'colonialism' represent just one special case of a relationship where the latter did not obtain. The article thus proposes a mechanism though which the spread of European capital could have retarded financial market formation in now-developing areas with otherwise considerable concentration of 'native' mercantile capital.

1. Introduction

The quote above describes two closely related phenomena: the emergence of tradable public debt along with private money and credit markets. Both were based on, in Smith's words, 'the universal confidence in the justice of the state'; in case of the money market, since it was the state that was primarily responsible for enforcing impersonal contracts. The fact that the state was implicated in guaranteeing the security of 'public' credit, and being an arbiter and contract enforcer in the 'private' money market necessarily created a direct link between them. Finally, their relationship was institutionalized insofar as it was based on stable mutual expectations between the state and investors. The phenomenon of *institutionalization*, where the state is crucially implicated as a contract enforcer and arbiter, distinguishes markets of the kind the quotes imply, from markets in commercial paper *per se* predating the emergence of national states.

What conditions were responsible for these phenomena? Moreover, why did Smith's quote apply to only a small number of now-developed countries during the 18th and early 19th centuries? Notwithstanding the presence of substantial mercantile capital, this did not apply to a vast majority of emerging states,

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both 'independent' and 'colonial'. For instance, despite having an extensive class of merchant-bankers who traded in a variety of credit instruments, and who were often creditors to British and other European merchants over the 17th and 18th centuries, neither pre-colonial nor colonial India fits the description. Explicitly state-endorsed and supported money and credit markets did not exist in pre-colonial India, while the colonial period was characterized by a dichotomy between an 'informal' – albeit substantial – 'native' money and credit market, and a 'formal', though severely limited, European market.

Attributing financial systems' poor development to colonialism begs the question. Why would colonialism retard market development, especially since it is often credited with introducing European-style market institutions in the first place?[1] Also, it does not account for the lack of an institutionalized financial system during the immediate pre-colonial period. A starting point toward answering these questions could begin with Smith's observation about 'confidence in the justice of the state', aspects of which have been elaborated in the modern property rights literature beginning with North and Thomas (1976). But though this literature accounts for some of the institutional arrangements that increase 'confidence [among investors] in the justice of the state,' it does not explain when such arrangements are likely to be instituted. The question can thus be restated: under what conditions are states likely to protect the property rights of financial investors *and* create confidence among investors in their continuing promise to do so?

An answer to this question captures most of the details linking rulers' attempt to commit to protect investors' property rights to the emergence of the financial institutions described earlier. In addition, the case of India demonstrates that though lack of institutionalized commitment by pre-colonial rulers prevented the creation of a state-supported financial system, the colonial state further eroded indigenous investors' financial property rights, precluding the emergence of any such system. India is a particularly good test of the argument presented here because a historical accident during the establishment of the East India Company (henceforth EIC or the Company) state allows consideration of the counterfactual possibility that an integrated (i.e., including indigenous bankers and merchants), state-supported financial system *could have* emerged but for the absence of crucial factors underlined in this paper's theoretical argument.

The article's first section discusses the property rights literature with special reference to financial systems. Much of it derives from North and Weingast's (1989) argument about credible commitments and the emergence of public credit in England. Arguments building on this work tend to interpret it as implying that exogenous political institutions facilitate credible commitments, and thus the emergence of institutionalized financial systems. The section argues that the institutions of credible commitment were endogenous to power relationships,

1 See, e.g., La Porta *et al.* (2008: 307–308, 310–311).

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and takes on the task of theoretically accounting for the emergence of self-enforcing institutions of credible commitment.

The second section applies the framework to the Indian case to empirically test the fit of key propositions, including the plausibility of a counterfactual suggested above. Normally, the difficulty of achieving this within the same case owes to the fact that even the counterfactual *possibility* is unobservable. However, demonstrating that the world envisaged by the theory was indeed an observable possibility, which was not realized for precisely the reasons the theory specifies, increases confidence in the plausibility of the counterfactual. This could be achieved by showing that relevant actors were aware of the counterfactual possibility, but, consistent with theoretical expectations, rejected it.

A financial system tying the networks of 'native' financial capital holders to the colonial state was arguably the most collectively efficient solution to the EIC state's early monetary problems. Moreover, one of its principal economic advisers suggested precisely this solution. The Company instead chose the more tortuous strategy of outright eroding the financial property rights of native bankers. The theoretical argument anticipates this outcome.

This article thus seeks to simultaneously answer a historiographical, and a theoretical question. The former concerns the puzzling failure of the EIC to adopt certain recommendations for efficiently reforming the money and credit system; the reason for this failure then have important implications for theories of 'efficient' institutions, in that it demonstrates that it could be a mistake to attribute outcomes – e.g., 'development' or 'efficiency' – to institutional differences *per se*.

Finally, the institutional consequences of power asymmetries might in turn have had long-term economic consequences. Banking systems have been implicated in the process of industrialization at least since Schumpeter's work (Schumpeter, 1939: 109–123; Sylla *et al.*, 1999). Though this article does not seek to explain growth, it proposes a mechanism though certain kinds of 'colonial' relationships could have impeded long-term economic growth by retarding financial market formation in now-developing areas with otherwise considerable concentration of 'native' mercantile capital.

2. The argument

North and Weingast's argument has antecedents in North, and North and Thomas's (1976) earlier work on the emergence of 'efficient' property rights. In this framework, rulers protect or guarantee constituents' property rights in return for payment or other resource assistance. But they also have incentive to defect from the implicit bargain by seizing property. The larger this probability, the less likely are potential investors to invest in the economy, resulting in lower levels of aggregate investment. Applied to financial systems, the argument is that though thriving debt and credit markets benefit the state since it comprises an

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important financial resource, such a market could not have a stable existence if participants do not expect rulers to carry out their end of the pact by honoring debts and not unilaterally seizing or abrogating financial wealth.

It follows that financial systems' variation is explained by the variation in the state's ability to abjure from these acts by signaling its willingness and ability to uphold financial compacts. Yet, setting this mutual expectation is not easy; as North and Weingast note, even repeated interactions cannot stabilize expectations if rulers heavily discount the future (1989: 806–808). This problem can be mitigated if an institutional arrangement aligns the mutual preferences of rulers and capital holders. Because any deviation from such an arrangement would adversely affect both their interests, it would become self-enforcing.

To have these properties the arrangement would have to constitute what North and Weingast term 'credible commitment' to investors by raising the costs – to rulers – of reneging to unacceptable levels. Moreover, such costs would be independent of the identities and preferences of those in a position to govern. Indeed such preferences are more appropriately seen as endogenous to institutional arrangements.

This discussion raises two questions, namely, what are the institutions of 'credible commitment', and under what conditions do they emerge? Answering the first involves at least two different interpretations of North and Weingast's argument, and a significant strand of the literature assumes one of them. Insofar as 'credible commitment' in England included the institutionalization of parliamentary supremacy and an independent judiciary, these institutions are generally seen as fundamental to the emergence of institutionalized financial systems, since they make it difficult for the executive to act unilaterally. Moreover, such institutions, insofar as *their origins* are unrelated to the causes of the establishment of institutionalized financial systems, could also be considered exogenous.

These theoretical assumptions support the claim that Anglo-American-style 'limited' governments facilitate the establishment of stable and 'efficient' financial systems (Haber *et al.*, 2003). Indeed, as shown below, some of North's own subsequent work seems to imply this interpretation. Yet on closer examination, the argument suggests another interpretation: first, the institutions of 'credible commitment' are endogenous, and second – once their endogeneity to other factors is established – the *specific* institutions of limited government are epiphenomenal; the co-occurrence of institutions of limited government with the development of an institutionalized financial system was an artifact of the historical conditions of 17th-century England.

That North and Weingast's argument does not necessarily imply the exogeneity of institutions is evidenced by the statement that they sought to 'explain the evolution of political institutions in 17th-century England, focusing on the fundamental institutions of representative government emerging out of the Glorious Revolution of 1688' (1989: 804). Further examination clarifies that

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'credible commitments' need not include such features as elected independent legislatures and party competition based on broad electoral suffrage. The English case is deceptive on this count, but the features of the institutions of 'credible commitment' illustrate why it was not limited government *per se*, but the power relationships behind these institutions that accounted for the development of financial systems.

'Credible commitment' in the English case included institutionalizing parliamentary supremacy and a judiciary independent of the Crown. But this commitment worked because of specific historical circumstances. Governmental commitment targeted a specific class of wealth holders who comprised the Parliament (1989: 804). Throughout the 18th century and into the 19th, franchise was highly restricted, so that major wealth holders had disproportionate influence on state policy relative to workers or peasants. Political contestation was limited to issues over which the membership of the parliament had some differences. As long as parliamentary membership was restricted, the institution was a very effective prior commitment to investors' interests. It couldn't be expected to perform similarly once franchise was expanded to all classes.

This exposes one problem with the argument that limited government allows investors to mobilize and assert their interests through an independent legislature in ways that constrict the executive's freedom of action. By the same logic, however, and given universal suffrage, it should also allow losers from the banking system in general and those opposed to banking *qua* business as opposed to a public service to organize against major investors and advance policies that may violate the initial commitment. On this count, the 'open access systems' envisaged in North *et al.* (2009: 21–27) could impede the credibility of such commitments. This form of commitment is therefore 'credible' only under the assumption that investor interests are necessarily *and* overwhelmingly represented in formal political institutions, and hence public politics.[2] The Parliament in the 17th and 18th centuries could fulfill this role, but some other institutional form would have to perform it as the historical situation changed.

Why, then, did commitment not break down with the expansion of suffrage? As North and Weingast observe, Parliament was not the only institution of 'credible commitment'. The other was the Bank of England, basically an incorporation of subscribers to a large government loan. 'The Bank was responsible for handling the loan accounts of the government and for assuring the continuity of promised distributions . . . since loans to the Crown went through

2 Indeed, Stasavage (2002, 2007) argues that partisan control significantly influenced credibility, even though parliamentary median was different from the population's median preferences. Yet he does not imply that partisan control by itself was necessary, principally because it would not explain commitment under conditions where the population median could coincide with the parliamentary median (and Stasavage's arguments are predicated upon a gap between them). Only self-reinforcing institutional commitments can do so.

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the Bank, 'it must have instantly stopped payment if it had ceased to receive the interest on the sum which it had advanced to the government'. The government had thus created an additional, private constraint on its future behavior by making it difficult to utilize funds of current loan if it failed to honor its previous obligations' (1989: 821). The importance of this constraint cannot be gainsaid; indeed, it was crucial to sustaining the original governmental commitment as circumstances changed.

It is this constraint – in various guises in different times and places – that shield investors' interests from 'politics'. For without this severing of the direct link between 'politics' and certain matters of 'economic policy' nothing stops organized opposition from enacting policies that could jeopardize any commitment the government made. It bears reiterating that institutional arrangements that can thus restrict general public participation in certain issue-areas are self-reinforcing in as much as deviation from such arrangements can adversely affect not only the state's interests, but large parts of the economy as constituted. The latter has another consequence: even if subsequent suffrage expansion dilutes investor interests in legislatures of limited governments, the costs to the economy, or the state, could deter otherwise hostile legislators from enacting policies that could affect 'credible commitments' adversely. Legislators' preferences could thus become endogenous to such commitments, avoiding the credibility problems inherent in 'open access systems' (North *et al.*, 2009: 21–27). There is no reason, therefore, why this private constraint could also not operate in regimes that are not limited because it is separable from other narrowly 'political' institutions. Again, this indicates that the association of 'open access systems' with certain kinds of markets may have little to do with the 'political' institutional features of such systems.

These implications of North and Weingast's argument highlight the importance of explaining the conditions that lead to institutional commitments propitious for the emergence of public credit, and as a positive externality, private money and credit markets. North and Weingast imply an exchange relationship between rulers and investors, akin to a Prisoners' Dilemma: rulers enforce property rights in exchange for resource assistance. Institutions of credible commitment solve the problem of defection in this situation. Yet if the situation between the state and investors was akin to a prisoners' dilemma to begin with, such institutional arrangements were unlikely to emerge. This problem led North in his subsequent work to worry about 'third party enforcement in contracting', and in particular 'the development of the state as a coercive force able to monitor property rights and enforce contracts effectively', since 'with a strictly wealth-maximizing behavioral assumption it is hard even to create such a model abstractly' (1990: 58–59). The explanation here does not assume that the state is a neutral arbiter, thus circumventing North's problem. The question of the state being 'neutral' – at least when it comes to the development of institutionalized money and credit systems –

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does not even arise in the same way; 'neutral' has little analytical meaning here since institutional rules are not distributionally neutral. The point rather, is the possibility of an institutional pact between the state and financial capital holders.

It follows that though institutions could solve future commitment problems, such problems did not prevent the initial act of institutionalization itself. It is still possible; however, to account for such arrangements within a rationalist framework once we relax the assumption that the parties to the negotiation are equals.[3] Indeed power differentials necessarily – though not sufficiently – determine the structure of interaction, and hence the respective parties' incentive to cooperate.

Knight conceptualizes power as the ability of one group or person 'to affect by some means the alternatives available to . . . [another] person or group' (1992: 41). This asymmetry could owe to differences in resource endowments, or even differences in institutional location. Indeed, asymmetry due to differences in endowments can translate directly into institutional asymmetry. In both instances asymmetry implies that in a bargaining situation between two actors, the more powerful one has better or equivalent alternatives than the less powerful counterpart (1992: 131–136). The same situation can also be described as the more powerful group being less dependent on the less powerful group than the latter is on it (Emerson, 1962).

As Tilly notes concerning the formation of European states, rulers had to rely on 'others who held the essential resources . . . and were reluctant to surrender them without strong pressure or compensation' (1992: 27). Investors and other financial wealth holders could obviously be one such source, but not the only one. Others could be taxation of, or rent from, land, or direct resource extraction. It follows that rulers will have an advantage in any bargaining situation *vis-à-vis* investors to the extent that they have access to alternative sources. This, however, is only one part of the bargaining situation.

In a world where physical violence can be deployed in a goal-directed manner, having force on one's side could be useful for commercial and other economic activities. Indeed, those supported by force have a distinct advantage in commercial activities over those not so supported. Given that rulers try to concentrate the means of organized violence, their support could prove crucial in determining the profitability of any business activity. Thus, investors would have an advantage to the extent that they had access to multiple rulers.

Returning to North and Weingast's framework, under what kind of power situation would rulers be compelled to make the concessions required to institutionalize a financial system? Suppose rulers had access to multiple sources (e.g., land, ownership of rent producing resources, access to foreign borrowing) and local investors faced only one set of viable rulers. The former, having the advantage, would have little incentive to make binding institutional

3 This presumption of game theoretic set-ups is noted, and questioned, by Moe (2005).

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commitments that hinder their freedom of action *vis-à-vis* the economy. Under these situations rulers' variable discount rates, or changes in rulers, among other idiosyncratic factors, would likely create problems for the continuing existence and stability of financial markets.

Many 'colonial' relationships are a special case of this situation. In such relationships, 'foreign' rulers' independence from 'native' investors is predicated on their access to 'foreign' financial investors or, alternatively, access to land revenue or control of rent-producing or extractable resources. This situation is not conducive to institutionalizing the kind of relationship between rulers and (domestic) investors that leads to the formation of a state-supported financial system. As the Indian case demonstrates, a corollary is that the state strengthens landholders' property rights, and/or binds itself in an effort to maintain access to 'foreign' creditors in a way that is often detrimental to 'native' financial capital holders' interests.

Rulers, on the other hand, would *necessarily* need to bid for domestic financial investors' support if their primary source of resources were connected to the activities of the latter. Merchants and bankers would more likely support rulers who better protected their interests. Instead of an exchange, the relationship between rulers and financial capital holders would be one of coordination, where each partner is better off cooperating when the other cooperated because not cooperating would directly harm its own interests (Hardin, 1997: 26–36). Cooperation could take several forms, but each side would have incentive to make cooperation by the other more likely.

Why wouldn't each assume that the other would also cooperate? Assuming there could be several coordination scenarios, unilateral cooperation might still be costlier than mutual cooperation. In this scenario, each side would be uncertain of the others' intent, and cooperation might not occur in the first round of interaction. On the other hand, if we consider interactions continuous rather than discrete and one-shot, cooperation would become more likely once actors learned from previous failures. Under such circumstances, rulers would have incentives to assure capital holders that the latter could augment their wealth by cooperating, while financiers would have incentive to assure rulers of their cooperation in maintaining external autonomy and internal hierarchy.

The institutional manifestation of such assurance could include versions of the 'private' constraint North and Weingast discuss. Such constraints have the capacity not only to credibly signal state intentions, they also can insulate financial capital holders' interests from those of other societal groups that may not have the same incentive structure as the rulers. An especially effective commitment would transfer control of parts of the economy, especially those related to money and credit, to private banks, which would basically be an agglomeration of investors. The notes of such banks could be accorded the status of currency or be acceptable for taxes and other payments. In this way, private financial organizations would have privileged influence over the total

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stock of money in the economy. As discussed earlier, such 'private' constraints developed a 'public' face in the form of parliamentary supremacy in England, but that owed solely to the fact that those claiming to assert control over purse strings also were the only ones who could vote and serve in a legislature.

In a different historical context, versions of the private constraint could include the institution of a central bank independent of direct legislative control – having to do precisely with the impermanence of the aforementioned contextual condition – with power over monetary policy.

Additional steps could include those North and Weingast describe: lenders handling state accounts and revenue receipts. This would further give both groups a stake in the maintenance of such a system since while investors would develop concern for the profitability of the loans advanced, governing elites would have a similar preference in maintaining the banks' solvency.

Taken together, such institutional commitments would be propitious for the development of a market for state debts, banks being both underwriters and investors in such debt. This would also lead to the development of 'private' banking markets. As North and Weingast note in the English context, 'The institutions leading to the growth of a stable market for public debt provided a large and positive externality for the parallel development of a market for private debt. Shortly after its formation for intermediating public debt, the Bank of England began private operations. Numerous other banks also began operations at this time. This development provided the institutional structure for pooling the savings of many individuals and for intermediation between borrowers and lenders. A wide range of securities and negotiable instruments emerged in the early 18th century and these were used to finance a large range of activities' (1989: 825). This is not surprising since the institutional commitments described above decisively implicate the state in market transactions; indeed, the market becomes constituted by such institutions. The state's commitment to institutional 'rules' over time, translates into confidence in the state's commitment to enforcing impersonal contracts.

The remainder of this article demonstrates why the 'ideal typical' situation described above did not materialize in colonial India. This proceeds in theoretical, rather than chronological order in two parts. First, I show that something akin to the scenario described above was a real possibility presented as the most 'efficient' solution to colonial governors tasked with addressing problems arising from the economic transformations following the emergence of EIC rule. Second, I argue that the failure of the latter to obtain can be traced directly to the structure of the relationship between 'foreign' rulers and 'native' capital holders where the former lacked incentives to make the kinds of concessions that could lead to the emergence of an institutionalized financial system. Moreover, this exacerbated a situation where the pre-colonial state was only sporadically involved in the functioning of 'private' money and credit markets. This was due, again, to the prevailing power relationship between 'native' rulers and financiers,

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where rulers had no stable incentives to accord special protection to the latters' interests. Ironically, it was precisely this situation that led indigenous bankers and merchants to assist the EIC in its struggles against 'native' rulers. And, though their assistance to the Company was rational in the short-term, it proved fatal in the medium-to-long term as the new rulers drastically eroded their financial property.

3. States, money and credit in India

The counterfactual

In the mid-1780s, Cornwallis arrived in India as the third Governor General of the – Company-ruled – 'presidency' of Bengal, charged with regularizing Company revenues, fighting administrative corruption, and putting government finances on sound footing. Despite acquiring one of the subcontinent's richest and most lucrative provinces, the Company was having problems realizing the riches its directors in London had expected. Part of the problem was widespread corruption among Company servants who plundered the Bengal treasury, and diverted the revenue collected after the military defeat of the local ruler.[4] The other problem was scarcity of currency – chiefly silver, which was dominant in the subcontinent. Various European companies trading in India, including the EIC, had hitherto imported bullion in order to pay for Indian goods. The Company ceased this practice after acquiring Bengal, since it expected revenues to obviate the need for bullion imports. Yet the Bengal revenues did not suffice (Marshall, 1976: 179; Mitra, 1991: 24). In addition to the aforementioned plunder, the opening of trade with China – which required silver exports from Bengal – resulted in scarcity of payment medium.[5]

Cornwallis's predecessors had attempted to relieve currency scarcity by introducing bimetallism and, when that failed, a uniform currency (Mitra, 1991: 28–29; Sinha, 1925: 47). A major reason for those failures was that both measures went directly against the interests of local bankers and moneychangers (*shroffs*). Indeed, such measures – especially the introduction of a uniform currency – aimed specifically at repudiating these 'native' financial capital holders' property rights. This proved difficult. Although the Company had become the sole rulers of Bengal, the task of controlling its economy was complicated by the highly decentralized credit and monetary system, which was partially due to the earlier disintegration of centralized Mughal rule. The total amount of payment medium, including its supply and definition, was immediately subject to the activities of numerous bankers and merchants who also controlled and operated mints. The Company state too had mints directly under its control,

4 Marshall (1976: 158).

5 Harry Verelst, the second governor, estimated that Bengal lost over £8,000,000 in bullion. See Verelst, (1772: 79–81, 86).

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but did not have a monopoly over coinage. It was only one participant among others, albeit an important one, in the money and credit system.

Thus, when the Company wrested control from the *nawab* (title of the rulers) of Bengal, it also secured control over one of the province's largest mints. But this did not confer it monopoly since it still did not have de facto control over most of the mints. So the various Governors Generals' attempts at currency control could be thwarted by *shroffs* who held currency stocks. Lacking monopoly over currency stocks, the Company's other option was to use its monopoly over organized violence to compel *shroffs* to follow its dictates. But, though it was clearly the only coercive authority in the province, the Company did not yet possess the administrative capacity to *effectively* enforce its authoritative commands and monitor the *shroffs*' activities within a territory the combined size of two large European countries. There was, however, a third, arguably more 'efficient' policy option to ameliorate currency shortage, which involved working in concert with – rather than against – the interests of *shroffs*. This solution would have required relatively little administrative capacity, and yet induced the willing cooperation of the local merchants and bankers. Instead, for reasons noted below, the state chose to follow a longer and more arduous, 'inefficient' process.

Though the silver coin predominated in the region, it passed at various rates of discount once it passed three years from its minting date. Newer coins were called *sicca* rupees, while those more than three years from the date of minting were called *sanouts*. *Shroffs* regulated the rates of discount (*batta*) between *siccas* and *sanouts* of various dates. The Company initially tried to relieve currency shortage by introducing gold as a currency alongside silver. Upon failing, officials sought to establish a uniform *sicca* currency minted exclusively in Company controlled mints, and prohibit any distinction between *siccas* and *sanouts*.

But again, the Company had neither a monopoly over the stock of existing *siccas*, nor sufficient administrative capacity – including effective control over mints situated far from Calcutta – to ensure compliance. Thus, any deviation of the officially mandated rate of exchange (between old and new currency) from the prevailing market rate could create arbitrage opportunities. Indeed, the very 'market rate' could be set by native bankers to their advantage, and at the expense of the Company. This is precisely what accounted for Clive's failure to introduce gold (Sinha, 1925: 48), and, subsequently, Verelst's failure to introduce a common currency (Mitra, 1991: 70–90; Verelst, 1772: 94–95).

At the failure of the first attempt, the government determined that the major problem was weak supervision of mints situated outside Calcutta. Thus, in addition to prohibition discounting of coins, it also closed three mints outside Calcutta (Chatterjee, 1996: 197–98; Mitra, 1991: 40). This too failed because it proved unrealistic for those making payments to the government to travel to Calcutta to exchange coins for current *siccas*. Cornwallis eventually had the greatest success when aided by the war against the kingdom of Mysore – which

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allowed him to import a large amount of silver throughout the 1790s – and possibly the earlier draining of *shroffs' sicca* stocks due to the mint closings, he managed to establish the sliver *sicca* as the official government currency (Chatterjee, 1996: 200, 220; Esteban, 2001; Furber, 1948: 242–243; Mitra, 1991: 58).

Its effect on purely non-governmental transactions was mixed. There is some evidence that despite the order, 'unauthorized' coins remained in circulation, and moneychangers continued their business in various districts of Bihar as late as the 1820s (Chatterjee, 1996: 201–202; Bagchi, 1985: 503). Nonetheless, the Company government managed to achieve its major goals regarding currency. It established itself as the province's sole minting and financial authority and solidified its predominant role in 'high finance', excluding all native bankers and merchants. This began the process of the Indian capital market's division into what Keynes would characterize later as the 'European' money market and the 'Indian' market (1913: 195–196). The distributional implications were clear to contemporaries. Indeed, in sharp contrast to 'native' bankers, British merchants welcomed the government's policy measures (Mitra, 1991: 44).

These objectives took nearly forty years to achieve, and came at much cost to the economy of Bengal, and the government itself.[6] Yet, since 1772, there existed an alternative proposal, which would have introduced a uniform currency and simultaneously mitigated the shortage more *collectively* 'efficiently'. Economic historians have noted the existence of this proposal in a report that circulated among Company policymakers. Yet, an explanation for why it was never adopted – even as other suggestions in the document were – remains to be advanced.[7]

We have noted, so far, the difficulties the Company faced in effectively enforcing its monetary dictates. It has also been observed that much of the difficulty was ascribed to the recalcitrance of indigenous bankers and moneychangers. As Company officials noted, *shroffs* were adept at defeating any measure 'that was likely to injure their gains'. So adept in fact, that their machinations were likened to the '[t]alents of Sir Issac Newton and Mr. Locke' (Mitra, 1991: 54). Yet the government persisted in its efforts instead of cooperating with them. One of the Company's principal advisors in England, Sir James Steuart (1772), had suggested precisely this solution to the Company's currency problems.

Steuart suggested that the Company could increase circulation and in doing so, reduce shortage by introducing paper currency (bills of exchange, both native and European, were not considered legal tender). This, however, was not all.

6 This process of demonetization was repeated in other provinces as the EIC gained control of them. See Bayly (1983: 274).

7 The only remark about its non-acceptance is that it was too advanced for its time. See Sinha (1925: 49).

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He insisted that native bankers and merchants be included in the larger plan. Indeed, he contended that paper currency should be issued and discounted by banks controlled collectively by 'native' and European financiers.

Steuart made his suggestions in a report then widely circulated among the EIC governors. The report's second part deals specifically with the proposal for paper credit and banks. In language reminiscent of one justifying the quasi-private nature of the Bank of England, it said, 'the principle on which this branch of credit is grounded, is totally incompatible with sovereign power. It is founded on private utility, and it has even occasion for a superior authority to keep it within bounds' (1772: 74). The reason, predictably, was that if the State established its own bank, and if the bank managed to corner most of the species of Bengal it would be tempted expend all or most of it for defense, depriving the paper currency from any backing (1772: 74). Steuart then proposes a bank similar to the Bank of England that would be capitalized at the amount lent to the Company. The entire fund lent to the Company could then be,

> divided into shares . . . transferable as the funds are in England, bearing . . . interest . . . and an exclusive privilege may be granted to the subscribers . . . for the purpose of carrying on a banking trade; by the issuing of notes in the discounting of good bills . . . or in consideration of pledges of treasure, jewels or precious effects deposited in the Bank: or upon the mortgage of good property, and the best personal security, for such length of time as may be judged reasonable and safe: or in the purchase of gold and silver: Or lastly for advancing certain sums of money to the Company, upon the security of their annual revenue, according to the practice of the Bank of England (1772: 77–78).

Further, 'under these and such other regulations that the EIC may think proper to add, this Banking Company may be laid open to natives as well as Europeans' (1772: 78). That he was aware of the consequences of this advice is clear:

> It is impossible to say what operations will be carried on by the Bank . . . . It may for this purpose open offices in all the principal cities of Bengal; which will be admirably well calculated for calling in and recoining all the old and unequal coin. The shroffs will naturally become proprietors, and will lend their assistance in this particular, which will be a douceur for them. They will be employed in a trade something like what they now carry on; but it will be so fenced in proper regulations, that it will have every advantage and none of the inconveniencies of the present practice (1772: 79). (Italics added)

He recognizes that in this situation there is no longer incentive for native bankers to oppose the Company's currency measures. It is worth pointing out two interrelated aspects of Stuart's plan concerning the financial property rights of indigenous lenders, and the integration of these lenders into colonial finance. Instead of abrogating the financial property rights of native bankers by demonetizing some of the currency they held outright, the plan would

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have altered them in a distributionally neutral, or even advantageous, way. Put differently, it would have sufficiently compensated them – especially by giving them a long-term stake in the new monetary system – for their willingness to relinquish *status quo* property rights. It would also have involved extensive cooperation with indigenous bankers. Steuart continues,

> It would not . . . be proper to admit any person of the council to be . . . a director of this Bank [he later suggests in a different context, that an indigenous banker would be a good candidate for the governor of the bank] . . . If we consider the rate of money in Bengal, there will be perhaps 8 per cent on the Bank stock, and 8 per cent more upon discounting loans &c. both together will produce so great an emolument as to engage people of wealth and property in the banking scheme: Besides, the very notion of standing upon a solid and independent footing, will be extremely flattering to many of the natives. *And as the establishment is planned upon the same principles as the Bank of England, it is natural to suppose that it may produce similar effects in supporting the credit of the Company on one hand, and in being supported by the Company on the other (1772: 79–80).* (Italics added).

Steuart here describes the counterfactual to what actually occurred in Bengal. The consummate technocrat, he did not consider if the Company had any incentive to carry out his plans, or if the Company's creditors in London or the British government could countenance a situation where native bankers would be in a position to dictate the new government's monetary policy. The problem, in his mind, was clearly defined: how to overcome the currency shortage, while simultaneously promoting a uniform currency so as to simplify economic transactions. He imagined the government would be open to doing whatever would produce the most 'efficient' outcome, in collectively utilitarian terms. And, to be sure, his solution was perhaps the most efficient one *if one agreed with the definition of the problem*. However, the problem, from the Company's perspective, was how to standardize the currency and increase circulation, while simultaneously establishing and maintaining sole control over the monetary situation in Bengal. They did not defeat the *nawab* and seize mints only to relinquish power over the Bengal economy to local bankers and merchants.

The very structure of the relationship between 'native' financial capital holders and the state precluded mutual cooperation and hence the outcome Steuart envisaged. The new rulers had a distinct power advantage, which allowed them to disregard native capital holders' preferences. The state's advantage in turn was predicated on its relationship with native landed elites and, more importantly, the London financial market. The lack of an institutionalized money market with mass deposit banking, or the use of contemporaneously 'modern' fiduciary instruments that would allow the government to manage seasonally fluctuating demands for currency were a direct result. Native capital constituted the *bazaar*,

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the 'informal' money and credit market: 'informal', precisely because of the lack of state involvement.

The contrast with the state's relationship with landed elites was particularly instructive. The EIC state further strengthened landlords' property rights by making them outright owners of land, rather than revenue collectors, ostensibly in order to maximize the same. Bayly expresses the historians' consensus that the famous 'Permanent Settlement' giving them this status 'entrench[ed] the power of zamindars or landlords . . . in the interests of stable revenue for an imperial state at war' (2000: 379).

The mechanism and outcome

The new financial system, though it displaced 'native' financiers from their positions in the subcontinent's economy, also intensified a situation where the Mughal state was only sporadically involved in the 'private' money and credit market. So, in Mughal provinces with high density of financial capital holders, merchants' associations (*mahajans*) were largely autonomous from the state in setting market rules, interest rates or production standards (Pearson, 1976: 131). On one hand, rulers' indifference ensured that merchants could formulate their own laws of exchange in spheres that did not concern rulers; on the other, it handicapped them since, unlike their European counterparts, they did not have the reliable backing of the state. The Mughal state was never 'their' state and Mughal laws were never 'their' laws – in fact there were no Mughal laws governing exchange and commerce (Das Gupta, 1982: 407–433; Pearson, 1976: 119–20).

This has been the source of puzzlement among economic historians, who repeatedly note extent and sophistication of indigenous financial markets, with instruments and credit networks that spanned the entire subcontinent – which were not lacking relative to contemporaneous European credit systems – observing at the same time their apparent lack of systematic connection to the government, as was increasingly the case in Europe around the same time (Chaudhuri, 1975: 97; Habib, 1969: 73–74).[8]

This owed to the fact that by far the largest source of revenue for the Mughal state was tied to land. Other revenues barely registered in official accounting.[9] Mughal rulers therefore never considered merchants and bankers stable or *necessary* sources of state finance, even during wars. Indeed the state itself was a major lender to its nobility and high officers, and provincial-level state elites combined their governing functions with extending credit, including to merchants (Habib, 1969: 58; Raychaudhuri, 1982: 186; Richards, 1981: 292–294). Thus, having a clear advantage in the power-relationship, rulers did not

8 Also Habib (1982: 363), for the 'private' nature of fiat money/book money.

9 See these contemporaneous sources: Fazl (1891 [1590?]: 129–412), Eliott (1877: 138, 164). For later estimates based partially on these earlier ones, see Pearson (1976: 23–24), Sinha (1962: 1,3).

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need to make special dispensation towards financial capital holders. Again, a corollary – and contrast – to rulers' relationship with capital holders was that *zamindars* (landlords) were considered state agents who directly collected land revenues and passed it on to higher officials, keeping a portion for themselves. Indeed, the designation *zamindar*, which predated the Mughals and connoted different kinds of property rights that varied over time and region, became equated with the right to collect taxes directly. This right was subject to seizure only upon a payment – by the state – as compensation for being excluded from a particular piece of land (Habib, 1982: 244–245). *Zamindars*, unlike merchants and bankers, were incorporated directly into the state, and hence received its protection, and there is evidence that this even created a market for *zamindari* rights (Habib, 1969: 45; 1982: 245).

The foregoing should not imply a picture of the 'Mughal state as an Oriental despotism, "monopolizing trades at the drop of a hat, fleecing merchants at breakfast, and generally carrying on as a public nuisance"' (Subrahmanyam, 2001: 6). As Das Gupta observes, Indian merchants and bankers 'neither enjoyed the patronage of . . . [the] state nor . . . [went] in fear of . . . [the] government' (1982: 422). They dominated trade in the Indian Ocean though most of the 16th and 17th centuries, and numerous merchants and bankers became exceedingly wealthy – wealthy enough to be major short-term creditors of European trading companies (Chaudhuri, 1978: 67–68; 1975: 62–74; Chaudhury, 1988: 97–100; Watson, 1987). Their financial relationship with the EIC was the principal reason why they assisted the Company during its struggles against local rulers after the breakdown of central Mughal rule. It was a matter of a simple calculation of relative benefits, not unlike ones they had been accustomed to performing in the past. There had been instances of merchants offering to monetarily compensate the Mughal emperor for damages due to the latter's skirmishes with Europeans in return for not disrupting trade or escalating military confrontation (Pearson, 1976: 119–120). The only difference was that now the EIC was actually in a position to challenge the local ruler. This difference accounted for the long-term deleterious consequences of the new Company state for indigenous merchants and bankers.

The breakup of the Mughal state following the death of Emperor Aurangzeb in 1707 implied much greater autonomy for provincial rulers who had been *subahdars* (provincial administrative officers) of the emperor. The disruption in revenue transfer mechanisms and loss of access to regional treasuries led them to reorganize the mechanisms of revenue extraction. Thus, the rulers of erstwhile Mughal *subas* (provinces) with access to large land revenues and the machinery for realizing them generally continued as before. But where such revenue collection mechanisms faced disruption, rulers had to rely on merchant-creditors and even involve them in the revenue collection system. Yet this inclusion was temporary because these transitory disruptions did not change rulers' expectations of their principal long-term sources. Thus, such

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arrangements were not credible. Though they benefitted bankers, who stood to lose substantially in the event of a breakdown, the cost to rulers was negligible. As a result, they were unstable and sensitive to factors such as the specific identity of the ruler.

The *subahdar* of the province of Bengal, Murshid Quli Khan, had been originally appointed as the *diwan* (revenue and treasury officer) by Emperor Aurangzeb. After Aurangzeb's death – as central Mughal rule attenuated – Murshid Quli Khan combined the offices of the *subahdar* and *diwan*. Additionally, he made the banking house of his friend – who had moved with him to Bengal – the official banker of the rulers of Bengal and awarded the head of the house the title of 'Jagat Seth' or 'Bankers of the World' (Bhattacharya, 1969: 3; Subramanian and Ray, 1991). This was in return for the assistance that his friend Manikchand's successor, Fateh Chand, had rendered in reorganizing Bengal revenues. Every head of the banking house held the title until the Battle of Plassey in 1757, when the EIC wrested control of the revenues.

Their 'official' status gave Jagat Seth bankers keys to the treasury and partial control over mints, allowing them considerable influence over exchange rates and credit flow in Bengal. Additionally, the state accepted their deposit notes in lieu of amounts deposited by *zamindars*, and drew drafts on the house to make payments. The Jagat Seths also stood security for *zamindars*' revenue payments (Subramanian and Ray, 1991: 38–39). Yet this arrangement was not credible. The Jagat Seths were merely intermediaries who could be removed or replaced without much cost to the rulers, because the state itself was never indebted to the banking house. Indeed, rulers explicitly refused direct financial assistance from the Jagat Seths (Sinha, 1962: 23). The overwhelming majority of state revenue still depended on land that the *zamindars* controlled. Moreover, the rulers of Bengal were quite conscious of this. As Sinha notes, '[t]he attitude of the Subhadars from Murshid Quli to Alivardi [one of his successors] could be best expressed in the following words – "Let them grow rich, the state will grow rich also"' (1962: 23). Consequently, merchants and bankers, unlike *zamindars*, were accorded no role in statecraft (Ray, 2003: 235).

The Jagat Seth's – and generally indigenous merchant and bankers' – relationship to the EIC was similar to their relationship with the state in one fundamental way. Although the Company dealt extensively with them, it never considered them permanent or long-term partners. Indeed, the EIC governors explicitly discouraged their merchants from seeking local credit (Chaudhury, 1988: 98–99). This was because the EIC was a principal participant in the 'financial revolution' in England, and was the second-largest borrower in the London financial market (Dickson, 1967: 407). The government, in return for the Company's enormous loans to the Crown, backed repeated EIC debt issues. This gave both its stockholders in London and the government a vested interest in controlling Company servants' activities in India. Yet in return for this control, both the government and stockholders had to repeatedly consent to new debt

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issues. As Furber, commenting on the Company state's early years, put it, without fresh issues allowing EIC servants in India to cash in their bills of exchange on London thus facilitating continued repatriation of wealth from India to Britain, the latter 'would have been forced to attempt to govern India themselves in an effort to protect their investment' (1948: 269).[10] As noted earlier, and will be further shown below, continued access to the London financial market was directly responsible for the lack of a similar financial system in India.

Nonetheless, so long as it was not in a position to challenge, first, the Mughal state, and then its provincial successors, the EIC had to rely on local merchant bankers' resources for bridge credit. Sometimes, this short-term credit was substantially more than half the value of the Company's investments in Bengal (Chaudhuri, 1975: 65, 74–82; Chaudhury, 1988: 97–100). No wonder then, that some EIC merchants saw the Jagat Seths – who were only the most prominent among many local bankers they dealt with – 'a great Banker than all in Lombard Street jointed together' (Bhattacharya, 1969: 101; Chaudhury, 1988: 91, 92). The system whereby local merchant bankers acted both as brokers, and advanced short-term credit to finance the EIC's purchases was called the *dadni* system. And consistent with the explanation advanced, the Company discontinued this system shortly after acquiring access to land revenues (Sinha, 1961: 6–7; Bhattacharya, 1983: 289–290).

Given the structure of these relationships, conflicts between the EIC and local rulers were manifestly against local financial capital holders' interests. From these bankers' perspective, it was precisely the *status quo* – where the EIC at least acquiesced to the authority of local rulers – that allowed them to profit from their relationship with the Company. Evidence of their subsequent actions – especially their efforts to mediate between local rulers and the EIC to de-escalate conflicts – suggests that they were well aware of this. Yet given that they were structurally powerless *vis-à-vis* both parties, the extent to which they could influence outcomes was limited.

The Company was perpetually reluctant to pay duties to local rulers. As K.N. Chaudhuri observed, '[a] trading organization that voluntarily offered £10,000 to its sovereign equated a payment of £500 to an Asian Prince with political extortion' (1978: 461). The reasons for this apparent hypocrisy are easily fathomed once one realizes that the EIC was an enterprise 'whose monopoly and other commercial privileges were upheld by the state largely as a result of the financial payments received by the Crown . . . [and whose] entire permanent capital of £3 million was lent to the Crown' (Chaudhuri, 1985: 120). Local rulers, on the other hand, resented that the Company, unlike Armenian and other merchants trading in Bengal, insisted on its own fortifications and army. This was a direct affront to local rulers' authority, more so, since Company merchants were seen to be transgressing their customary roles as 'mere' merchants expected

10 Also see Furber (1948: 18), and Dickson (1967: 234).

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to play no role in matters of governance, including order and protection (Hill, 1968[1905] Vol III: 161,Vol I: 196, Vol II:15; Ray, 2003: 235).

When these tensions erupted into armed conflict between the EIC and Siraj-ud-daula, the ruler of Bengal, the latter initially drove the Company out of its fortifications. Prominent merchants and bankers of Bengal, including the Jagat Seth, then tried to broker a compromise between the *nawab* and the English to restore the *status quo* ante. Siraj refused to allow the Company to trade unless they gave up their arms and fortifications (Hill, 1968[1905] Vol I:3, 58;Vol II:145). Additionally he grew suspicious and subsequently hostile towards the principal bankers of Bengal, including the Jagat Seths for pleading on the Company's behalf (Hill, 1968[1905] Vol III: 175).

The subsequent decision of local merchant-bankers, including the house of the Jagat Seth, to assist the Company in bribing the *nawab*'s generals was quite rational (Ray, 2003: 246).[11] While they could not influence the EIC to relinquish its weapons and fortifications – even if they would have preferred this – they could play some part in unseating a ruler whose reign was increasingly costly for them, in terms of both lost business and his increasingly hostile posture. From their perspective, his removal would have gone a long way in restoring the *status quo* ante. The *status quo* had, however, irrevocably changed in ways that were deleterious to these local bankers' interests. Even had they anticipated the long-term consequences of their actions, they did not have the luxury to act otherwise, given their structural situation.

In the aftermath of the Battle of Plassey of 1757, the EIC secured *zamindari* rights to some of the most lucrative districts of Bengal, in addition to exemption from all duties and taxes (Hill, 1968[1905] Vol II: 383–85). Their demands on local rulers did not stop there. The new rulers' – the bribed generals who replaced Siraj – refusal to concede the Company's more extravagant demands, among them to reinstitute custom duties and tax competitors when the ruler had decided to make trade free within his realm, led to yet another battle eight years later (Ray, 2003: 248, 278–301; Vansittart, 1976[1766]: II, 430, 365, 378–9, 368–70). The Battle of Buxar of 1765 gave the Company control over the Bengal treasury.

The implications for local merchant bankers were consistent with the framework advanced here. The Jagat Seths lost control over the treasury and a major mint. More generally, as Company servants indulged in what Marshall described as large-scale looting of Bengal coffers, erstwhile debtors to local bankers became creditors in their own right (Marshall, 1976: 158, 40, 43–44). In addition to what has already been described with respect to currency – and the end of the *dadni* system after 1758 – some local bankers became deputies to British merchants (Marshall, 1976: 44–45; Watson, 1980: 262). And although the Company persisted in using local merchant-bankers' existing credit networks to transfer

11 Also Khan (1789 Vol I: 720–44) for the perspective of a local historian.

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funds across the subcontinent during their various conflicts, this too ended once it started establishing its own banks and other revenue transfer mechanisms.[12]

It bears reiterating the point implicit in Furber's observation that without continued access to the London financial market, EIC merchants would have had to 'govern India themselves'. Governing India 'themselves' would have entailed a very different kind of financial system than what eventually emerged. The one that did emerge was an institution whose primary purpose was to facilitate the transfer of merchants' funds from India to Britain, which accounted for many of its 'missing' features relative to contemporaneous European markets. All of this was due to the EIC government's (and after 1857, the government of India's) continued access to the London financial market, and the institutional concessions that the government in London extracted for this access.

Revenue from lands the Company acquired after 1765 did not necessarily lead to dramatic improvements in its financial situation, since it was almost immediately embroiled in a series of conflicts in other regions of the subcontinent, and the land revenue, though substantial, did not quite suffice. As a result its dependence on British creditors increased throughout the 19th century (see Figure 1).[13] However, it did succeed in increasing its stock prices in London, and assuring both the government and its stockholders that their confidence in the Company was not misplaced (Bowen, 2006: 59, 4, 17, 31; Furber, 1948: 29). Had access to the London market not been so direct, the Company would have had to float 'permanent' domestic debts. Indeed, that this is an exceedingly plausible counterfactual is evidenced by the fact that flotation of domestic debts was a point of contention between the government in India and the Board of Control in London.[14]

The government in India wanted the option to float debts in pursuit of territorial expansion, while the Board's view was like that of a merchant organization that wanted the government to simply transfer 'surplus' Bengal revenue to London by applying it to trade (Ingram, 1970: 130–132, 190–191, 217–218). Yet, the expansionary conflicts made it impossible use all the revenue towards trade, forcing the Company government to borrow from its own

12 For the EIC's use of banking networks see Subramanian (1996:146–159); for its end, see, Subramanian and Ray (1991: 56), Tripathi (1979: 10–11), Chatterjee (1996: 192–3), Bagchi (1987: 42).

13 Evidence of EIC finances prior to 1835 is fragmentary, but consistent with more complete figures for sources of revenue and debt (the latter being an indirect, and approximate measure of total expense) available for later years. For estimates of revenues before 1835, see Furber (1933: 30), Furber (1948: 236), Tripathi (1979: 100, 281), Bowen (2006: 226). For an estimate of debts and interest payments, see Bowen (2006: 35, 280), Furber (1948: 81, 97–8, 111–13, 265), Marshall (1987: 105).

14 The Board (set up as a part of Pitt's India Act of 1784) was comprised of parliamentarians and headed by a cabinet member, and had ultimate authority over Company affairs in India. The Act institutionalized the British state's controlling role over the EIC in return for financial assistance. The General Court of EIC stockholders could no longer overturn any decision of the Directors that was approved by the Board. See, among others, Bowen (2006: 75–76).

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Figure 1. Revenue and Debt, 1837–1877.

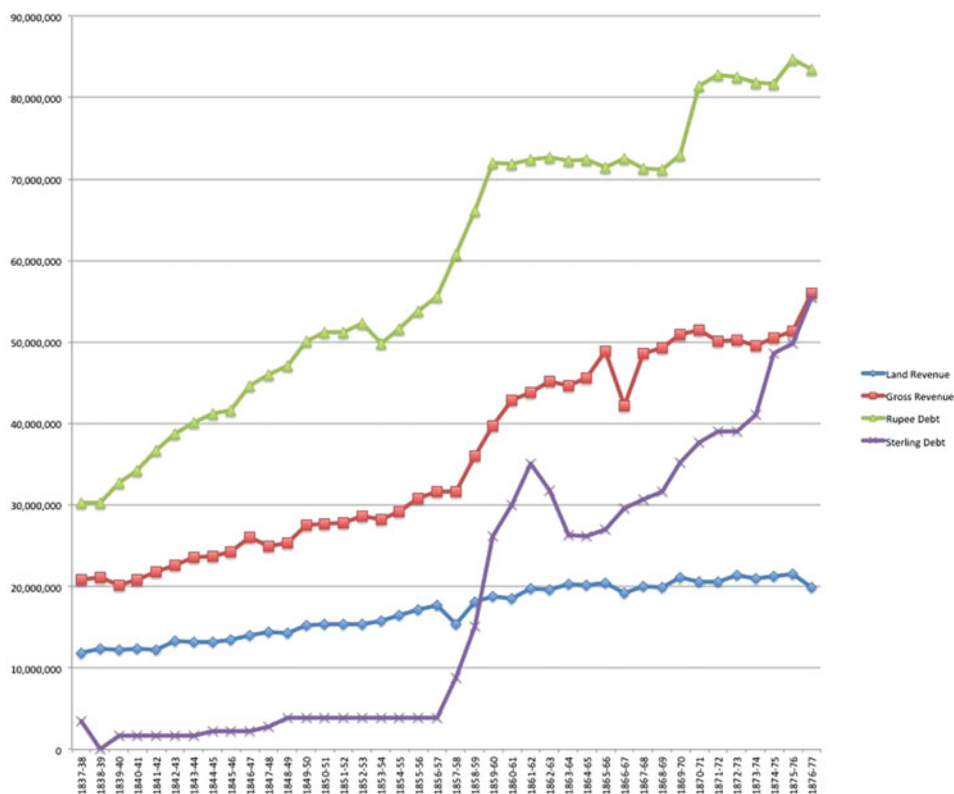

Figure 1 (all amounts in £.) Sources: Banerji (1995: 302–3, 50), and Dutt (1956: 212, 217, 373–74). Government monopolies in opium and salt were the other chief sources of revenue. Detailed figures of the latter are not available, but in 1858–9, they made up about a quarter of the total revenue (Kumar 1983, 916).

servants in India. This, however, did not lead to anything like the creation of a market for state debts as conventionally understood. Lending to the government became just another way of transferring Company servants' savings to London. The government offered bills of exchange payable in London after a fixed period, and the Company met these obligations often though further borrowing in the London market. The same drive to repatriate wealth led to the creation of 'agency houses', which tapped into mainly British capital 'to be invested in country trade or indigo or usurious loans to the government' (Tripathi, 1979: 10). This was inconvenient for the government since it impeded the formation of a pool of capital to draw from in times of need. The government complained, but the Board of Control wanted to preclude precisely what the government wanted (Ingram, 1970: 191; Tripathi, 1979: 170, 62). The Board knew the policy of debt transfer necessarily tied British merchants (and agency houses) trading in India to London, and made the government (in India) responsive to its directions.

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Thus, on one hand, the Board advised the EIC government against incurring too many expenses in India and issuing bills of exchange to fund them (since these debts would eventually come back to London), but on the other never altered its debt transfer policy.

Government revenues hardly improved, and the general policy of tying India's debts to London continued under different guises throughout the 19th century, as did strict London control of the Indian financial system. Thus, the Board retained power to cancel licenses granted by the government of India to agency houses if it thought said houses had powerful native partners (Tripathi, 1979: 151). The official banks in the presidencies of Bombay, Bengal, and Madras were denied such commercial banking functions as 'the regulation of the whole monetary or credit system of the country or the regulation of the foreign exchange market' (Bagchi, 1987: 48). The currency of India was strictly tied to bullion movements so that it 'could be expanded only by bringing in funds from abroad, say by buying commercial bills in London or by importation of sovereigns', thus precluding such measures as fractional reserve banking (Chandavarkar, 1983: 774). As an early 20th century observer noted, unlike in the West, there was no 'recourse to . . . arrangements', where 'fluctuations in demands for currency [could] largely [be] met by an increase or decrease in the use of fiduciary contrivances' (Andrew, 1901: 484). In the second half of the 19th century, specialized banks called 'exchange banks' were allowed to deal in foreign exchange and bullion. But most 'were British, in the sense that they were incorporated in Great Britain, had their main office in London, and most of their shares were owned by British investors' (Goldsmith, 1983: 29).

Every institutional measure extracted in return for EIC government's (and later, the British government of India's) access to the London financial market can be seen as a 'credible commitment' to its creditors. Vital effects of the commitment, however, were geographically displaced. They were felt, not in India, but in the London financial market, facilitating its further development. Thus, capital for infrastructural projects after the 1857 mutiny was raised mainly in London. Only about one percent of the capital for railway construction was raised in India. As an additional incentive for investment, railway loans were guaranteed a minimum rate return by the Indian government (Hurd, 1983: 749–50). The decision to raise funds for such projects in the London market was partly a result of the difficulty of doing so in India, which was itself an outcome of earlier decisions described above.

'Native' capital retreated to domains left to it, thus becoming a part of the 'informal' sector. This sector – the *bazaar*—was highly organized, and had banking networks connecting every major Indian city though a variety of negotiable paper (Bayly, 1973: 349; Ray, 1992: 12). Yet it's worth reiterating that the *bazaar* was necessarily limited. Since the state did not enforce contracts, mass deposit banking of the kind emerging in the West could not really develop. Absent an impersonal contract-enforcer, banking was limited to merchant networks, and

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thus the *bazaar* could not avail of individual savings systematically. It nonetheless would figure in important developments at the turn of the century, including as a source of funds for both the first indigenous large-scale manufacturing enterprise, and the Indian National Congress (Ray, 1992: 11; Sen, 1992: 125).

4. Conclusion

This article provided an account of the endogenous emergence of state-endorsed and integrated money and credit markets. While this kind of explanation falls within the tradition that conceives of market institutions as fundamentally 'political' (Fligstein, 2002; Polanyi, 1957), and institutions as outcomes of power relationships (Chibber, 2003; Knight, 1992; Waldner, 1999), this article has brought those insights to bear specifically on the emergence of state-connected money and credit markets.

Although narrowly focused on the money and credit system, it has important implications for arguments – most influentially by Acemoglu *et al.* (2001, 2002, 2005) – that link institutional features like property rights protections and limited government to long-term economic growth. First, the case of India casts some doubt on the mechanism Acemoglu *et al.* (2001, 2002) suggest in explaining long-term growth, namely Europeans' propensity to settle in a particular region, either as a function of (European) mortality rate (Acemoglu *et al.*, 2001), or preexisting prosperity and population density (Acemoglu *et al.*, 2002). In addition to the policies such as those of debt transfer referred to earlier, there is clear evidence that both the Crown and British creditors wanted to intentionally preclude European settlements and the 'mixing' of Europeans with 'natives' to prevent outcomes akin to the American Revolution (Ingram, 1970: 191;Tripathi, 1979: 62). Thus, the effects of colonialism, at least in the subset of cases with mercantile communities, possibly manifest themselves though mechanisms that are different from those Acemoglu *et al* suggest, although they result in similar institutional, and in the long run, developmental outcomes.

Second, Inasmuch as they assert the importance of political institutions for economic institutions (Acemoglu *et al.*, 2005: 392) the criticisms here apply equally. For instance, in their earlier (2001; 2002) articles, they group measures for risk of expropriation, constraints on the executive, and a democracy index together as signifying the nature of institutions. But as shown here, these indicators are sensitive to historical context – and thus cannot be generalized – since the concomitant emergence of constraints on government power including over expropriation, and political contestation, but due to highly restricted franchise could have been the peculiar legacy of the historical period in question. There is no theoretical reason why certain kinds of private property protections by the state could not coexist with authoritarian institutions, especially since the latter, by restricting direct public participation in economic policy, could enhance credibility to investors.

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Further, it might be problematic to refer to property rights (or strong protection thereof) *simpliciter* in order to explain economic growth (Acemoglu *et al.*, 2001, 2002, 2005) since they could vary by institutional setting. The state could, while strongly protecting one group's property rights, not accord the same protection to others; thus the colonial state in India protected landlords' property rights, while destroying native financiers'. This can account for the apparently contradictory evidence of the massive violation of – certain kinds of – property rights in the history of many now-developed countries (Chang, 2002, 2011).

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The same confidence which disposes great merchants and manufacturers, upon ordinary occasions, to trust their property to the protection of a particular government, disposes them, upon extraordinary occasions, to trust that government with the use of their property. By lending money to government, they do not even for a moment diminish their ability to carry on their trade and manufactures. On the contrary, they commonly augment it...The security which it grants to the original creditor is made transferable to any other creditor, and, from the universal confidence in the justice of the state, generally sells in the market for more than was originally paid for it. The merchant or monied man makes money by lending money to government, and instead of diminishing, increases his trading capital.

Adam Smith, *Wealth of Nations*

References

Acemoglu, D., S. Johnson, and J. A. Robinson (2001), 'The Colonial Origins of Comparative Development: An Empirical Investigation', *The American Economic Review*, **91**(5): 1369–1401.

Acemoglu, D., S. Johnson, and J. A. Robinson (2002), 'Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution', *The Quarterly Journal of Economics*, **117**(4): 1231–1294.

Acemoglu, D., S. Johnson, and J. A. Robinson (2005), 'Institutions As a Fundamental Cause of Long-Run Growth', in P. Aghion and S. N. Durlauf (eds.), *Handbook of Economic Growth, vol. IA*, Amsterdam: North Holland.

Andrew, A. P. (1901), 'Indian Currency Problems of the Last Decade', *The Quarterly Journal of Economics*, **15**(4): 483–516.

Bagchi, A. K. (1985), 'Transition from Indian to British Indian Systems of Money and Banking, 1800–1850', *Modern Asian Studies*, **19**(3): 501–519.

Bagchi, A. K. (1987), *The Evolution of the State Bank of India; The Roots, 1806–1876, Part I: The Early Years, 1806–1860*, Bombay: Oxford University Press.

https://doi.org/10.1017/S1744137416000023 Published online by Cambridge University Press

Banerji, A. (1995), *Finances in the Early Raj: Investments and the External Sector*, New Delhi: Sage.
Bayly, C. A. (1973), 'Patrons and Politics in Northern India', *Modern Asian Studies*, **7**(3): 349–388.
Bayly, C. A. (1983), *Rulers, Townsmen and Bazaars: North Indian Society in the Age of British Expansion, 1770–1870*, Delhi: Oxford University Press.
Bayly, C. (2000), 'Ireland, India and the Empire: 1780–1914', *Transactions of the Royal Historical Society*, **6**(10): 377–397.
Bhattacharya, S. (1969), *The East India Company and the Economy of Bengal From 1704 to 1740*, Calcutta: Firma K.L. Mukhopadhyay.
Bhattacharya, S. (1983), 'Eastern India', in D. Kumar, (ed.), *The Cambridge Economic History of India*, **vol. 2**: **c.** 1757–1970. Cambridge, UK: Cambridge University Press.
Bowen, H. V. (2006), *The Business of Empire: The East India Company and Imperial Britain, 1756–1833*, Cambridge, UK: Cambridge University Press.
Chandavarkar, A. G. (1983), 'Money and Credit, 1858–1947', in D. Kumar (ed.), *Cambridge Economic History of India, Volume II*. Cambridge, UK: Cambridge University Press.
Chang, H.-J. (2011), 'Institutions and Economic Development: Theory, Policy and History,' *Journal of Institutional Economics*, doi: 10.1017/S1744137410000378.
Chang, H.-J. (2002), *Kicking Away the Ladder: Development Strategy in Historical Perspective*, London: Anthem.
Chatterjee, K. (1996), *Merchants, Politics, and Society in Early Modern India, Bihar: 1733–1820*, Leiden: E.J. Brill.
Chaudhuri, S. (1975), *Trade and Commercial Organization in Bengal, 1650–1720*, Calcutta: Firma K.L. Mukhopadhyay.
Chaudhuri, K. N. (1978), *The Trading World of Asia and the English East India Company, 1660–1760*, Cambridge, UK: Cambridge University Press.
Chaudhuri, K. N. (1985), *Trade and Civilization in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, Cambridge UK: Cambridge University Press.
Chaudhury, S. (1988), 'Merchants, Companies and Rulers: Bengal in the Eighteenth Century', *Journal of the Economic and Social History of the Orient*, **31**(1): 74–109.
Chibber, V. (2003), *Locked in Place: State Building and Late Industrialization in India*, Princeton, NJ: Princeton University Press.
Esteban, J. C. (2001), 'The British Balance of Payments, 1772–1820: India Transfers and War Finance', *The Economic History Review*, **54**(1): 58–86.
Dasgupta, A. (1982), 'Indian Merchants and the Trade in the Indian Ocean' in T. Raychaudhuri and I. Habib (eds.), *The Cambridge Economic History of India, Volume I: c. 1200-c. 1750*, Cambridge, UK: Cambridge University Press.
Dickson, P. G. M. (1967), *The Financial Revolution in England: A Study in the Development of Public Credit, 1688–1756*, New York: St Martin's Press.
Dutt, R. C. (1956), *The Economic History of India in the Victorian Age: From the Accession of Queen Victoria in 1837 to the Commencement of the Twentieth Century*, London: Routledge and Keegan Paul.
Elliot, H. M. (1877), *The History of India as Told by its own Historians: The Muhammadan Period, Volume VII*, in J. Dowson (ed.), London: Trubner and Company.
Emerson, R. (1962), 'Power-Dependence Relations,' *American Sociological Review*, **27**(1): 31–41.
Fazl, A. (1891 [1590?]), *A'in I Akbari, vol. II*, H. S. Jarrett (ed.), Calcutta: Asiatic Society of Bengal.

https://doi.org/10.1017/S1744137416000023 Published online by Cambridge University Press

Fligstein, N. (2002), *The Architecture of Markets: An Economic Sociology of Twenty First Century Capitalist Societies*, Princeton: Princeton University Press.
Furber, H. (ed.) (1933), *The Private Record of an Indian Governor-Generalship: The Correspondence of Sir John Shore, Governor General, with Henry Dundas, President of the Board of Control, 1793–1798*, Cambridge, MA: Harvard University Press.
Furber, H. (1948), *John Company at Work: A Study of European Expansion in India in the Late Eighteenth Century*, Cambridge, MA: Harvard University Press.
Goldsmith, R. W. (1983), *The Financial Development of India, 1860–1977*, New Haven: Yale University Press.
Haber, S., D. C. North, and B. Weingast (eds.) (2008), *Political Institutions and Financial Development*, Stanford: Stanford University Press.
Habib, I. (1969), 'Potentialities of Capitalistic Development in the Economy of Mughal India', *The Journal of Economic History*, **29**(1): 32–78.
Habib, I. (1982), 'Agrarian Economy', in T. Raychaudhuri and I. Habib (eds.), *The Cambridge Economic History of India, Volume I: c. 1200-c. 1750*, Cambridge, UK: Cambridge University Press.
Hardin, R. (1997), *One For All: The Logic of Group Conflict*, Princeton: Princeton University Press.
Hill, S. C. (ed.) (1968[1905]), *Bengal in 1756–1757: A Selection of Public and Private Papers Dealing with the Affairs of the British in Bengal During the reign of Siraj-Uddaula, (3 Volumes)*, New York: AMS Press.
Hurd, J. M. (1983), 'Irrigation and Railways', in D. Kumar (ed.), *Cambridge Economic History of India, Volume II*. Cambridge, UK: Cambridge University Press.
Ingram, E. (ed.) (1970), *Two Views of British India: The Private Correspondence of Mr. Dundas and Lord Wellesley*, Bath: Adams & Dart.
Keynes, J. M. (1913), *Indian Currency and Finance*, London: Macmillan.
Khan, G. H. (1789), *Seir Mutaqharin Or A View of Modern Times*, vol. 1, Calcutta: James White.
Knight, J. (1992), *Institutions and Social Conflict*, New York: Cambridge University Press.
Kumar, D. (1983), 'The Fiscal System', *The Cambridge Economic History of India Vol. II*. Cambridge, UK: Cambridge University Press.
LaPorta, R., F. Lopez-de-Silanes, and A. Shleifer (2008), 'The Economic Consequences of Legal Origins,' *Journal of Economic Literature*, **46**(2): 285–332.
Marshall, P. J. (1976), *East Indian Fortunes: The British in Bengal in the Eighteenth Century*, Oxford: Clarendon Press.
Marshall, P. J. (1987), *Bengal: the British Bridgehead: Eastern India, 1740–1828, The New Cambridge History of India*, Cambridge, UK: Cambridge University Press.
Mitra, D. B. (1991), *Monetary System in the Bengal Presidency, 1757–1835*, Calcutta: K.P. Bagchi and Company.
Moe, T. (2005), 'Power and Political Institutions', *Perspectives on Politics*, **3**(2): 215–233.
North, D. C. (1990), *Institutions, Institutional Change, and Economic Performance*, New York: Cambridge University Press.
North, D. C. and R. P. Thomas (1976), *The Rise of the Western World*, New York: Cambridge University Press.
North, D. C. and B. R. Weingast (1989), 'Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England', *Journal of Economic History*, **49**(4): 803–832.

https://doi.org/10.1017/S1744137416000023 Published online by Cambridge University Press

North, D. C., J. J. Wallis, and B. R. Weingast (2009), *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*, New York: Cambridge University Press.

Pearson, M. N. (1976), *Merchants and Rulers in Gujarat: The Response to the Portuguese in th Sixteenth Century*, Berkeley: The University of California Press.

Polanyi, K. (1957), *The Great Transformation: The Political and Economic Origins of Our Time*, Boston: Beacon Press.

Ray, R. K. (1992), 'Introduction', in R. K. Ray (ed.), *Entrepreneurship and Industry in India, 1800–1947*, Delhi: Oxford University Press.

Ray, R. K. (2003), *The Felt Community: Commonalty and Mentality Before the Emergence of Indian Nationalism*, Delhi: Oxford University Press.

Raychaudhuri, T. (1982), 'The State and the Economy', in T. Raychaudhuri and I. Habib (eds.), *The Cambridge Economic History of India, Volume I: c. 1200-c. 1750*, Cambridge UK: Cambridge University Press.

Richards, J. F. (1981), 'Mughal State Finance and the Premodern World Economy', *Comparative Studies in Society and History*, **23**(2): 285–308.

Schumpeter, J. A. (1939), *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process, Volume 1,* New York: McGraw-Hill.

Sen, A. K. (1992), 'The Pattern of British Enterprise in India 1854–1914: A Causal Analysis', in R. K. Ray (ed.), *Entrepreneurship and Industry in India, 1800–1947*, Delhi: Oxford University Press.

Sinha, J. C. (1925), 'Economic Theorists Among the Servants of John Company (1766-1806)', *The Economic Journal*, **35**(137): 47–59.

Sinha, N. K. (1961), *The Economic History of Bengal: From Plassey to the Permanent Settlement, Volume I*, Calcutta: Firma K.L. Mukhopadhyay.

Sinha, N. K. (1962), *The Economic History of Bengal: From Plassey to the Permanent Settlement, Volume II*, Calcutta: Firma K.L. Mukhopadhyay.

Stasavage, D. (2002), 'Credible Commitment in Early Modern Europe: North and Weingast Revisited', *Journal of Law, Economics, and Organization*, **18**(1): 155–186.

Stasavage, D. (2007), 'Partisan politics and public debt: The importance of the "Whig Supremacy" for Britain's Financial Revolution', *European Review of Economic History*, **11**(1): 123–153.

Steuart, J. (1772), *The Principles of Money Applied to the Present State of the Coin of Bengal: Being an Inquiry into the Methods to be Used for Correcting the Defects of the Present Currency; for Stopping the Drains which carry off the Coin; and for extending Circulation by means of Paper Credit*, East India Company.

Subrahmanyam, S. (2001), 'Introduction: The Indian Ocean World and Ashin Das Gupta', in A. Das Gupta (ed.), *The World of the Indian Ocean Merchant 1500–1800: Collected Essays of Ashin Das Gupta*, New Delhi: Oxford University Press.

Subramanian, L. (1996), *Indigenous Capital and Imperial Expansion: Bombay, Surat, and the West Coast*. Bombay: Oxford University Press.

Subramanian, L. and R. K. Ray (1991), 'Merchants and Politics: From the Great Mughals to the East India Company', in D. Tripathi (ed.), *Business and Politics in India: A Historical Perspective*, Delhi: Manohar.

Sylla, R., R. Tilly, and G. Tortella (eds.) (1999), *The State, the Financial System and Economic Modernization*, Cambridge: Cambridge University Press.

Tilly, C. (1992), *Coercion, Capital and the European State, AD 990–1999*, Cambridge UK: Blackwell.

https://doi.org/10.1017/S1744137416000023 Published online by Cambridge University Press

Tripathi, A. (1979), *Trade and Finance in the Bengal Presidency, 1793–1833*, Calcutta: Oxford University Press.

Vansittart, H. (1976[1766]), *A Narrative of the Transactions in Bengal, 1760–1764*, in A. C. Banerjee and B. K. Ghosh (eds.), Calcutta: K. P. Bagchi, Indian reprint.

Verelst, H. (1772), *A View of the Rise, Progress, and the Present State of the English Government in Bengal: Including a Reply to the Misrepresentations of Mr. Bolts, and Other Writers*, London: J. Nourse.

Waldner, D. (1999), *State Building and Late Development*, Ithaca: Cornell University Press.

Watson, I. B. (1980), *Foundation for Empire: English private Trade in India, 1659–1760*, New Delhi: Vikas Publications.

Watson, B. (1987), 'Indian Merchants and English Private Interests: 1659–1760', in A. Das Gupta and M. N. Pearson (eds.), *India and the Indian Ocean, 1500–1800*, Calcutta: Oxford University Press.

https://doi.org/10.1017/S1744137416000023 Published online by Cambridge University Press