Co-existence of Standardized and Humble Money:

The Case of Mughal India

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One of the principal strengths of the Mughal Indian economy was the availability of a well-organized and highly sophisticated monetary and credit system. A centrally directed system of coinage with an in-built mechanism of quality control contributed in no small measure to the growth of manufacturing, production and trade. The standardized coinage of the empire was further supplemented in an important way by an extensive use of uncoined non-standardized money. This paper discusses in Section I the principal features of the Mughal coinage system while in Section II we take up the use of non-standardized money, often labelled humble money, in the empire.

I

The Mughal Indian coinage consisted of coins of three metals – the gold muhr, the silver rupee, and the copper dam or paisa. The basic coin constituting the main unit of account was the silver rupee. The gold muhr was used mainly either for ceremonial purposes or for hoarding\(^1\). The copper dam or paisa constituted a major medium of handling small value transactions and was used extensively. A distinguishing feature of Mughal coinage was the extraordinarily high content of the relevant metal of a very high degree of purity in the coin. Thus the gold muhr which weighted 169 grains troy was practically of unalloyed metal of high purity. The alloy content in the silver rupee, which weighted 178 grains until Aurangzeb raised the weight to 180 grains, was also never more than about 4 percent. The copper dam weighted 323 grains till 1663-4 when its weight was reduced to about two-thirds of its former value\(^2\). The coins were manufactured in imperial mints spread all over the empire. The procedure followed was that of ‘free’ mintage under which anyone could bring bullion, old coins or foreign coins to a mint and obtain after a lapse of time new coins in exchange. The number of coins delivered against a given quantity of metal depended upon the purity level of the metal surrendered. This was determined at the mint. A charge was made at the mint to cover
the seigniorage, the loss of metal in the process of coining, and the cost of coining which consisted partly of the cost of the necessary ingredients other than the metal and partly of the labour involved. As far as the question of the relative valuation of the coin of one metal in terms of each of the other two was concerned, this was left entirely to the market and depended upon the relative market supply and demand of each of the three metals.

In the case of the silver rupee, the new coin delivered by the mint was known as the sikka rupee. The value of this coin corresponded broadly to the value of the metal contained in it, plus the minting charges including seigniorage. The problem of wear and tear of a coin through use was tackled ingeniously by a complex system of equivalence based on a varying degree of premium being enjoyed by a new coin over older issues. The sikka rupee, defined as a coin minted during the current or the previous year, enjoyed such a premium over all older issues which routinely carried the year of issue on them. The rate of this premium was controlled for all practical purposes by a class of highly experienced and influential money-dealers known as sarrafs. Once the premium enjoyed by a new over an earlier issue exceeded a threshold level, defined by the wear and tear and the cost of reminting, the old coin would simply be brought to the mint for recoinage. This would be encouraged by the government insofar as its income from seigniorage would go up. Since the coins were intrinsic and not token coins, the problem of debasement of coins did not plague Mughal coinage. It also seems that forgery of coins was generally not a major problem.

The Mughal system involved monetary management by the state only in a limited way. The accretions to the supply of money were determined by the public itself subject to the availability of metals in the system and the capacity of the imperial mints. In this regard, the government was formally no different from any other member of the public except that its resource base was naturally larger than that of any private individual and the minting of its bullion would get priority. Further, the government could, and did, occasionally exercise its authority in directing the use of a particular metal for coinage. Thus in 1657 when an increase in the demand for copper coins in Surat took the rupee-paisa ratio to 1:40, while in 1642 it had stood at only 1:56, the mutasaddi (the port-
officer) of Surat ruled that all the copper imported into the city should be taken directly to the mint. In order to facilitate this, he banned the movement of the metal bought by the indigenous merchants from the Dutch East India Company (which was by far the single largest importer of this metal into the Mughal empire, mainly from Japan) to places outside the city. This ban remained in force over the two succeeding years. When the Van Adrichem embassy was sent to the court of Aurangzeb in 1662 to seek the renewal of the Company’s privileges by the new emperor, one of the concessions obtained was that the buyers of the Company’s copper would not be obstructed from carrying it out of the city, provided the Company kept bringing in large quantities of the metal. This clause of the farman was, however, not actually honoured in that the buyers of the Company’s copper continued to be required to take the metal to the imperial mint.

The strict quality control exercised on the imperial issues ensured acceptance of Mughal coinage of a given metal and of a given vintage at par throughout the empire. This, together with the constantly rising supply of money, considerably facilitated the growth of monetisation and thereby the growth in the volume of transactions and trade. Mughal imperial mints were scattered all over the empire though clearly some were more important than others, both in terms of the number of coins manufactured as well as the geographical area within the empire over which the issues of a mint ordinarily circulated. It is also important to realise that while the business of all the imperial mints was the crafting of refined metal into coins, this could be done under different entrepreneurial and technical arrangements. Small as the body of information pertaining to these questions is, it nevertheless suggests the existence of at least two distinct models along which the structure of a Mughal imperial mint was organised. The dominant model would seem to have been the one where Mughal state officials organised the work of production themselves. The alternative organisational arrangement involved the entrepreneurial function being performed by the sarrafs. What was common to the two patterns was the strict control exercised by the government on the quality of the coins manufactured.

In societies with a single-metal coinage, the smaller coins would obviously be fractions of the principal coin and would bear a fixed relationship to it. This would be the
case under multi-metal coinage as well provided there was a fixed relationship across coins of different metals. In such societies the production of coins of different metals and denominations would largely be a matter of metal availability and convenience. Of course, if the relative market value of different metals in terms of each other were to undergo a significant deviation from the fixed norm, coins of the metal whose relative value was on the increase would tend to be melted down. The situation in Mughal India was more complicated than this. Not only was coinage multi-metal (gold muhrs, silver rupees and copper dams) but also ‘free’ with the public having the right to take bullion, old coins or foreign coins to an imperial mint for conversion after a time lag into newly minted coins. More importantly, there was no fixed relationship across coins of different metals. As pointed out earlier, the gold muhr was largely a ceremonial coin also used extensively as a store of value. But it did not figure with any prominence in the settlement of ordinary transactions which were taken care of either by the silver rupee or the copper dam or paisa. Unless otherwise specified, a claim or an obligation stated in terms of rupees implied settlement in terms of the sikka rupee, namely a rupee coin manufactured during the current or the previous year. Payments made in rupee coins manufactured prior to the previous year, namely the chalani or the khazana rupees would need to be enhanced by a market-determined premium that the sikka rupee carried over these coins. In practice, however, this premium was fairly defined and subject only to marginal fluctuations. The situation, however, was quite different with respect to the relationship between the sikka rupee and the copper dam. According to Abul Fazl, the author of the Ain-i-Akbari, an administered dam:rupee rate of 48:1 was devised around 1575 for purposes of government transactions. But the actual market rate of exchange deviated quite considerably from this ratio. The dam was reported to have gone up as high as 35:1 sometime before 1583 when another administered rate of 40:1 was prescribed. This is also the rate quoted for 1595-6, the year in which the Ain-i-Akbari was written. This often created situations of great anomaly and hardship for particular sections of the society. To take a specific case, in 1575 while the rates of salary payment that Akbar’s manasabdars were obliged to make to the troopers engaged by them were specified in dams, fifty percent of the actual payment was to be made in rupees, twenty-five percent in gold coins and only the remaining twenty five percent in copper dams. To
help the cause of the troopers to the extent possible, the emperor laid down a rule that in the event the market rate of exchange between the *dam* and the rupee turned more than 40 *dams* to a rupee, (the administered rate at the time being 48:1), the conversion rate actually enforced would be 40:18.

The ideal way to avoid these kinds of situations would have been to enforce a fairly strict parity between the coin in which the claim/obligation was specified and the coin in which the settlement was actually made. In other words, the only way to insure a worker against the risk of fluctuations in the *dam*:rupee ratio would have been to both specify the wage in terms of *dams* as well as to make the actual payment exclusively in that coin. This was usually but perhaps not always the case. By the same token, a large payment eventually to be collected in silver rupees must also be denominated in the same coin. It is indeed the case that whatever information on wage rates is available in sources such as the *Ain-i-Akbari* is almost exclusively in terms of *dams*, irrespective of whether the basis of payment was daily or monthly (there does not seem to have been a tradition of weekly payment at all) or whether it was a time rate payment or a piece rate payment. The situation changed somewhat in the seventeenth century from about 1620 onward when one-anna, two-anna, four-anna and eight-anna coins (all fractions of the silver rupee coin - one-anna coin being one-sixteenth of a rupee) were also coined, though the scale on which these small silver coins were manufactured does not seem to have been very large. The result nevertheless was that while during the sixteenth century, copper coinage was probably the dominant coinage in Mughal India, this was no longer the case in the seventeenth century. John Deyell, for example, has demonstrated an immense contraction of copper minting after the close of Akbar’s reign9. Wage data for this period are, therefore, also found stated in rupee terms, though the overwhelming medium in which they continued to be specified was the copper *dam*.

Further changes took place in the eighteenth century as the decline of the empire set in. One was a certain amount of erosion in the acceptability of the *sikka* rupees at par throughout the empire, irrespective of where they had been minted. Thus writing in 1712, the factors of the English East India Company stationed at Calcutta observed, “The siccas
of all other mints though belonging to the King don’t go at the same batta as those coined in Bengal, the Surat pass but at 10 percent batta, the siccas of Dacca, Patna, and Cuttack though of same weight and fineness with those at Maxudavad go at 2 or 3 per cent less at Hughly and the same in other places where not coined, each place takes the King’s revenues in the coin of that mint to encourage it. However, by and large, the system seems to have continued in a reasonably healthy and unadulterated state until the take-over of the province of Bengal by the English East India Company in the second half of the century. A great deal of uncertainty and confusion marked the monetary system of the province during the early period of the Company rule and as yet we do not have an analytically sound analysis of the situation during the period.

II

In addition to an extensive use of standardized coinage while effecting transactions, a very substantial amount of market transactions in Mughal India were also conducted through the use of non-standardized money, sometimes referred to as humble money. This could consist of non-Mughal coinage as well as commodity money. The most important case in the former category was the persistent use of the mahmudi – a silver coin of the sultans of Gujarat – used in Surat, Broach and Baroda at least until about the middle of the seventeenth century, while the province had already been incorporated into the Mughal empire as early as 1572. Thus the mutasaddi of Surat was reported to be receiving the land revenue in terms of mahmudis in the 1630s and was obliged to convert the receipts into rupees before sending them on to Delhi. Again, in the account books of the Dutch East India Company’s factory at Surat, many of the prices are recorded in mahmudis rather than in rupees. How does one account for this deviation from the Mughal norm which was the supersession of local and regional coinages as the size of the empire expanded? While no definitive explanation yet seems possible, there certainly is merit in the suggestion made by Hans van Santen that this perhaps represented a device to keep a purely locally usable medium of exchange
available in Surat and its neighbourhood considering that the imperial rupee minted in Surat was chronically subject to flight to upper India in large quantities\textsuperscript{13}.

Commodity money used in Mughal India included small pieces of metals such as lead and tin of specified weights, bitter almonds known as \textit{badams} and so on. There were wide regional variations in the extent to which each of these mediums of exchange was used in different parts of the empire. The most preferred commodity money used in Gujarat, for example was \textit{badam}, 36 of which reportedly went for a copper \textit{paisa} in 1646\textsuperscript{14}.

By far the most important form of commodity money used in Mughal India, however, was \textit{cauris} or small sea-shells imported into the empire from the Maldive islands situated south-west of Sri Lanka in the Indian Ocean. The most important Mughal Indian region traditionally engaged in a large-scale trade with these islands was that of Eastern India, namely the provinces of Bengal, Bihar and Orissa. These provinces exported mainly textiles and provisions - mostly rice, oil and clarified butter – to the islands on a regular and substantial basis. The Bengali and Oriya merchants travelling to these islands from ports such as Hughli, Pipli and Balasore bought in return enormous quantities of \textit{cauris}, a product used extensively in world trade and in which the Maldive islands held a world monopoly. The first link in the chain was the procurement of these shells in the Maldive islands by Indian merchants who imported them both into Mughal India – mainly Eastern India – as well as South India – mainly Malabar on the south-west coast of India. As far as world trade was concerned, the next link in the chain was the procurement of these \textit{cauris} – both in the Maldive islands but mostly in India - in fairly large quantities by the European corporate enterprises, namely the Portuguese Estado da India in the sixteenth century and the English and the Dutch East India Companies in the seventeenth and the eighteenth centuries. These enterprises carried the \textit{cauris} as ballast to Europe where there was a very high demand for them for investment in the purchase of African slaves for the New World. In Africa, the \textit{cauris} circulated extensively as an exchange medium.
Within the subcontinent, the cauris were put to a variety of uses. These included use as ornaments and even for training young children to become accomplished merchants. Note the following extract from the instructions by Commissioner Hendrik Adriaan van Reede tot Drakenstein, heer van Mijdrecht to the Bengal factors of the Dutch East India Company issued in February 1687 and describing the Hindu Bania merchants of Bengal: “The merchants…are exceptionally quick and experienced. When they are still very young and in the laps of their parents and hardly able to walk, they already begin to be trained as merchants. They are made to pretend to engage in trade while playing, first buying cauris, followed by silver and gold. In this training as moneychangers, they acquire the capability of engaging in large-scale trade. They are always sober, modest, thrifty, and cunning in identifying the source of their profit, which they are always at pains to maximize. They have an exceptional capacity of discovering the humour of those who are in a position to help or hurt them. They flatter those they need to be in the good books of. In case of loss, they console themselves easily and can hide their sorrow wonderfully…In general they are a people with whom one could get along well so long as one is on one’s guard”15.

What the above extract establishes quite conclusively is the important role played by cauris as an important constituent of the monetary system of the province of Bengal. Transactions too small in value to be carried out in copper dams (or paisas) were carried out on a very large scale through the use of cauris. In fact for reasons which are not quite clear yet and which might indeed have had a large component of cultural elements in them, cauris were used on an extraordinarily extensive scale at least in the provinces of Bengal and Orissa.

At the beginning of the seventeenth century, a quintal of cauris cost around two shillings and ten pence in Maldives while the price fetched in Bengal was 300 to 400 percent higher making the Maldives-Bengal cauri trade one of the most profitable branches of Asian trade16. According to Thomas Bowrey (1669-79), in Bengal 4 cauris made one ganda, 20 gandas one pan, and 16 pans one kahana. 2½ such kahanas (or 3,200 cauris) went for a rupee17. There was, of course, no fixed rate of exchange between the
cauris and the Mughal Indian rupee or for that matter the Mughal Indian dam or paisa. The rate of exchange at any point in time was determined by the market forces of demand and supply of the two monetary mediums at that point in time.

As mentioned earlier, the principal use to which cauris were put in Mughal Bengal and Orissa was to take care of transactions too small in value to be handled in terms of the copper dams or paisas. It is, however, critically important to realize that the use of cauris was not limited to very small transactions. Even land revenue, by far the largest single source of state revenue in Mughal Bengal, as elsewhere in the empire, would seem to have been collected in part in cauris and converted into sikka rupees before being sent on to the provincial/imperial treasuries. A particularly interesting case is that of the district of Sylhet in the province of Bengal where the only currency medium in use would seem to have been the cauri. We know, for example, that between 1778 and 1789, the average annual land revenue in the district amounting to as much as Sicca Rupees 250,000 was collected entirely in terms of cauris at the rate of 5,120 cauris per sikka rupee. Large warehouses were constructed in the district to store the cauris till they were despatched to Dhaka in a fleet of boats. The additional costs thus incurred amounted to as much as 10 percent of the total revenue collected. At Dhaka, the cauris were sold at a public auction in exchange for sikka rupees. However, at the beginning of the nineteenth century, the practice of collecting revenue in cauris was discontinued and in 1820, the cauri was officially derecognized as a currency medium. Land revenue was henceforth to be collected in copper paisas.

The Mughal Indian monetary system would thus seem to have been characterized by the simultaneous existence of a highly sophisticated coinage system and an extensive use of non-standardized commodity money, the most important component of which was the small sea-shell called the cauri. The coinage system itself was rather complicated because the determination of value of the coins of one metal in terms of those of the other two was left to the market. Centralized direction and control, however, ensured total quality control of the coins manufactured at the imperial mints.
NOTES

1 In his 1646 description of the weights, measures and coins of Gujarat, Dutchman Johan van Twist observes: 'There is also a gold coin, called muhr or xeraphin worth 13½ rupees. This is, however, little used being mostly locked up by the rich in their treasuries' (Johan van Twist, Generale Beschryvinge van Indien, Amsterdam, 1648, p.58). The chapter containing this reference is reprinted, without its source being indicated, as Appendix Vc in Vol. II, Part III of Pieter van Dam, Beschryvinge van de Oost-Indische Compagnie, edited by F.W. Stapel, The Hague, 1939, R.G.P. No. 83.


4 Given that the technology used in the mints was hand technology, there was a certain amount of built-in flexibility in the capacity of the mints. This was particularly so in respect of those of the mints where the entrepreneurial and the managerial functions were decentralised.


6 The Ain-i-Akbari is part of a larger work that Abul Fazl Allami undertook on the orders of Emperor Akbar (reigned 1556-1605). The two volumes of his Akbarnama record the events of Akbar's reign, preceded by an account of the reigns of Babur and Humayun, Akbar's grandfather and father respectively. The third volume was devoted to recording the Ainha-i-Mugaddas-i-Shahi (the Sacred Imperial Regulations). It is this volume which is ordinarily referred to as the Ain-i-Akbari. I have used the edition translated from Persian by H. Blochmann, Delhi, 1977.

7 Under this system, all the senior military and civil administrative positions throughout the Mughal empire were held by officials known as mansabdars. From the time of Akbar onwards, each official held a dual numerical rank – zat (personal) and sawar (cavalry). The zat rank determined the official's status in the hierarchy besides his personal salary per annum, while the other rank specified the extent of the military obligations of the holder in terms of maintaining a certain number of horses, troopers and military equipment to be made available for imperial service, whenever required. The sawar rank also determined the annual sum of money to be reimbursed to the official against this obligation. The pay-claim of each official was met either in cash or through the grant of revenue collection rights over a specified area of land whose annual assessed revenue equalled the amount of the claim. Such areas were then known as jagirs. In
the initial years of his reign, Akbar insisted upon meeting the pay-claims of the mansabdars exclusively in terms of cash but the exigencies of administrative convenience later necessitated the increasing use of the jagir method. By the time we reach the period of Aurangzeb (1659-1707), revenue collection rights over nearly four-fifths of the total land in the empire had been alienated to the mansabdars.


11 H.W. van Santen, De VOC in Gujarat, p.81.

12 Om Prakash ed., The Dutch Factories in India, 1617-23, Delhi, 1984, p.341; H.W. van Santen, De VOC in Gujarat, pp. 81-82. A particular series of mahmudis approved by Akbar were manufactured by the rulers of Baglana in the Deccan for profit and sent on to southern Gujarat in fairly large quantities until the mid-1630s. J.F. Richards, ‘Official Revenues and Money Flows in a Mughal Province’ in Richards ed., Imperial Monetary System, pp.198-99.

13 H.W. van Santen, De VOC in Gujarat, pp.82-83.

14 Johan van Twist, Generale Beschryvinge, p.58.

15 Instructions by Commissioner Van Reede to the Dutch factors at Hughli, 21 February 1687, Nationaal Archief, The Hague, VOC (Verenigde Oost-Indische Compagnie) 1435, ff.132vo-133, 150vo-152.

