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Sugar and metals as commodity money in colonial Brazil

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Abstract

It has often been suggested that sugar was adopted as commodity money in colonial Brazil because of the limited circulation of metallic currency. This suggestion is correct in the sense that sugar might be considered commodity money insofar as its price was officially set and that it was made legal tender by the colonial authorities. So, sugar became "the objective standard that must correspond to the money of account", fitting the definition of commodity money given by Keynes. The suggestion is also correct in the sense that shortages of cash occurred, particularly in the second half of the 17th century, not only in Brazil but also in Portugal.

However, I believe that is not correct to say that sugar played the role of means of payment in colonial Brazil *because* of the shortage of coins. Contemporary documents revealing complaints from colonists about the shortage of hard currency may have led most historians to establish a direct link between the lack of coins and the adoption of sugar as means of payment. Instead, I argue that the monetary use of sugar should be understood mainly as a political artifice available to the colonial authorities for the purpose of mediating conflicts between, on the one hand, the owners of the sugar mills and sugarcane planters and, on the other hand, the metropolitan merchants and their agents.

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The paper begins with a brief description of the means of payment available in the 16th and 17th centuries in Brazil, followed by a review of the literature on possible reasons for the lack of hard currency in that period. Subsequently it presents a chronological account of Brazil's monetary situation during the 17th century, while discussing the motivations of the colonial authorities in regard to the adoption of sugar as a means of payment. I emphasize three particular instances throughout the period: the mid-1610s, when sugar, possibly for the first time, was imposed as legal tender; the early 1640s, when the first of the several enhancements of the money that characterized the second part of the century took place; and the late 1680s and early 1690s, when the colony implemented the monetary law of August 4 1688 in the midst of a deep economic crisis.

Introduction

It has often been suggested that sugar was adopted as commodity money in colonial Brazil because of the limited circulation of metallic currency. As many documents show, the settlers complained about the scarcity of coins and blamed it for the reduced prices of sugar and for the fiscal problems faced by the colony; in this sense, most economic historians have interpreted the use of sugar as means of payment as a way to overcome the problem of scarcity of specie[2].

The assertion that sugar was used as means of payment is correct in the sense that sugar indeed played the role of *commodity money* which, according to Keynes,

> is composed of factual units of a particular freely obtainable, non-monopolised commodity which happens to have been chosen for the familiar purposes of money, but the supply of which is governed (…) by scarcity and cost of production (Keynes, 1971, p. 6).

Keynes did not attribute much historical importance to the first known coinage in Lydia, about 600 BC:

> the fundamental transition, namely the transition to chartalist or State money, long preceded it. (...) For chartalism begins when the State designates the objective standard which shall correspond to the money of account (idem, p.10).

Accordingly, in colonial Brazil sugar could be considered commodity money every time its price was officially set and was made legal tender and accepted for the purpose of payment of taxes by the colonial authorities. This was the case, for example, in 1614, when the governor of the captaincy of Rio de Janeiro decreed that "sugar should run as

[2] Frederic Mauro (1960; 1997) was among the first to propose the relationship between the lack of metallic currency and the adoption of sugar as a means of payment in Brazil. Based on this author, John J. McCusker concludes that "to supplement a limited supply of coin, sugar was early used as a commodity money" in the Portuguese colony (McCusker, 1978, p. 300).

legal money, having fixed the value of the *arroba* of white sugar at 1$000 (...), ruling that the merchants should accept it in payments" (Coaracy, 1965, p. 39). Again, in February 1642, in Salvador – then the capital of the State of Brazil – the governor and other colonial officials signed "the terms of the accord on the prices of the different kinds of sugar and on the fact that sugar should be accepted as current money"[3]. In both instances, sugar could thus be classified as chartal money, or the objective standard that corresponded to the Portuguese unit of account (*real*).

Indeed, a large number of documents reveal that, at least up to the end of the 17th century, it was common practice in the captaincies of Bahia, Pernambuco and Rio de Janeiro to set the price of sugar "according to its quality" and to impose it as legal currency, particularly at the time of the arrival of the fleets[4]. The difference between Rio de Janeiro and the other captaincies in this respect is that in Rio the local council, controlled by the sugar planters, unilaterally imposed the price of the product, whilst in the other two captaincies the price of sugar eventually decided on by the authorities was regularly discussed among officially appointed representatives of the sugar-mill owners, sugar planters[5] and the merchants.

Contemporary documents revealing complaints from colonists about the shortage of hard currency may have led most historians to establish a direct link between the lack of coins and the adoption of sugar as means of payment. I argue instead that the monetary use of sugar should be understood mainly as a political artifice available to the colonial authorities for the purpose of mediating conflicts between, on the one hand, the sugar producers and, on the other hand, the metropolitan merchants or their agents.

The next section briefly describes the means of payment available in the 16th and 17th centuries in Brazil, followed by a review of the literature on possible reasons for the lack of hard currency in that period. Subsequently it presents a chronological account of Brazil's monetary situation during the seventeenth century, while discussing the motivations of the colonial authorities behind adopting sugar as a means of payment. I

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[3] Arquivo Municipal da Prefeitura do Salvador (AMS). Atas da Câmara 1641-1649, p.72.

[4] As time progressed, fleet convoys increasingly dominated trade with Brazilian ports. Leonor Costa (2002) presents a thorough discussion on the reasons behind the decision to adopt this system.

[5] For an exposition of the different roles played by planters and sugar-mill owners, see Schwartz (2005).

emphasize three particular instances throughout the period: the mid-1610s, when sugar, possibly for the first time, was imposed as legal tender; the early 1640s, when the first of the several enhancements of the money that characterized the second part of the century took place; and the late 1680s and early 1690s, when the colony implemented the monetary law of August 4 1688 in the midst of a deep economic crisis. A final section summarizes the main conclusions.

Means of payment in Brazil in the 17th century[6]

As Godinho (1991) points out, in contrast to their experience in other parts of the world, when the Portuguese first arrived to the shores of what is nowadays known as Brazil (in 1500), the local inhabitants lived a "natural" life-style in self-sufficient communities, which meant that not even "primitive" forms of money were needed. The indigenous population was put to work in exchange for petty products; the first such product explored by the newcomers was brazil-wood. During the first decades of the 16th century, Europeans working in Brazil were mostly paid in kind.

The circulation of coins began as the Portuguese started producing sugar and, later on and on a lesser scale, tobacco. Production in general was based on slavery, first using the local Indians, who were gradually substituted by African manpower. Throughout the seventeenth century, the colony expanded the production of flour and *cachaça*, aimed mostly at domestic consumption but also extensively used in the slave trade in Africa.

In the first two centuries, the demand for money grew parallel to the development of urban centers, all of them located along the coast, such as Salvador, Bahia (administrative capital of the State of Brazil from 1549 until 1763), Olinda and Recife (both located in the captaincy of Pernambuco), and Rio de Janeiro. In these centers, surrounded by sugar plantations, were concentrated the religious orders, the bureaucracy (members of the Judiciary, Treasury officials, etc.), large contingents of military personnel, a growing number of independent professionals, and the merchant

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[6] In this section we do not discuss the practice of direct exchange in the colony, nor do we discuss the theoretical hypothesis according to which the use of non-metallic commodities in payments could be considered a mere act of barter.

communities, both local, retail merchants, and those with international connections. What were the means of payment most used in the 17th century in Brazil? Taking into account the literature on Europe (and in particular the case of Portugal)[7], and the still sparse evidence available for the colonial era, first of all one can mention cash payments, that is, coined and non-coined precious metals, especially silver[8]. During the 16th and 17th centuries, gold coins and large silver coins entered Brazil through two main sources: (i) remittances from the metropolis, mainly for payment of civil, religious and military personnel[9]; and (ii) from the early 1580s, through commercial relations (often illegal) with the Rio de la Plata region (Canabrava, 1984), with European and Brazilian products, and African slaves, being exchanged for silver coins – "*reales de a ocho*", called "*patacas*" in Brazil.

These coins circulated internationally according to their intrinsic values, and were used by the colonist to pay for imported goods. Domestically, however, as was the case in Europe and in most European colonies, the extrinsic value of lighter silver coins and copper coins was subject to constant manipulation by both metropolitan and colonial authorities[10]. The "raising of the currency", that is, the increase in the nominal values of the coins without altering their metal content, was seen as a mechanism for attracting bullion as well as old, heavy, coins to the mint and for avoiding the export of gold and silver pieces. As for the coins of low nominal values, Brazil did suffer an intermittent shortage of small change up to the beginning of the 19th century.[11]

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[7] See, for example, Van der Wee (1977) and Supple (1957). Godinho (1991) and Sousa (2006) present a detailed description of the Portuguese monetary system in the late Middle Ages and the Early Modern period.

[8] Gold and silver could also be used as means of payment in non-coined forms, such as bars or dust.

[9] As early as the period 1549-1553, more than a third of the payments made by the government of Bahia were in cash (Levy, 1979, p.55).

[10] As McCusker (19768, p.302) puts it: "Nothing strikes the researcher into this subject more than the similarities in the monetary systems and exchange practices of New World colonies. Almost all of them dealt with shortages in their supply of hard currency by legislating a higher value for coin in local currency than it had in their mother country".

[11] For a discussion on the possible causes of the scarcity of small change in the Early Modern period, see, in particular, Cipolla (1967), Van der Wee (1977) and Sargent & Velde (1997).

In the State of Brazil, during the first two centuries of colonization, shipbuilding and the construction of fortifications and public buildings were always paid for in cash[12]. From the early 1600s, the salaries of public servants – civil, military and religious personnel – were also paid in ready money, while most transactions in urban property included coins as a means of settlement, either at sight or in installments[13].

Account books that registered debts and credits in units of account were commonly in the colony as a way of overcoming eventual currency shortages and of advancing credit. Such method of payment was usually circumscribed within small and local communities, where both debtors and creditors knew each other. Commercial networks composed of family groups *latu sensu* operated in different parts of Brazil and even elsewhere registering their reciprocal businesses in *deve & haver* books. Any eventual differences were settled over the course of many years either in cash or through bills of exchange[14].

Payments and transfers of large sums, particularly from the colony to the metropolis, and to a lesser extent from the metropolis to the colony, were preferably made through bills of exchange, thereby reducing transactions costs – which included the risks associated with transporting coins and precious metals across the Atlantic Ocean**[15]**. Both private and public sectors made extensive use of bills of exchange during the 17th century. Ebert (2004) has argued that at the beginning of the 1600s Portuguese

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[12] For example, in March 1678, as the Bahian Treasury was short of ready money, the government requested a "voluntary contribution" (*finta*), by which 1,000 boxes of white sugar were to be bought in cash by some of the wealthiest inhabitants of Salvador in order to pay for the repair of a vessel just arrived from India. The task of distributing the sugar among the inhabitants was to be carried out by two "trusty merchants with the knowledge of whom in the community had money available..." (DHBN, vol. VII, 1929, p. 278).

[13] A large number of examples can be found in the *Livro Velho do Tombo* do Mosteiro de São Bento de Salvador, as well as in the books of the Ofícios de Notas do Rio de Janeiro. These documents contain references to payment made or to be made in specific types of coin, "current money of this State [of Brazil] such as *patacas*, *meias patacas*, *sellos*, etc.

[14] Examples of this practice in Brazil during the 17th century can be found in Megale & Toledo (2005); for the 18th century, see Furtado (1999). For details on the use of such book-account records in colonial America, see Baxter (2004) and Priest (2001). Kohn (1999) describes this payment artifice in medieval and early modern Europe.

[15] Schwartz (2005); Mauro (1997). In macroeconomic terms, the use of bills of exchange allowed for a higher volume of transactions without raising the amount of circulating currency, that is, it increased the velocity of circulation of a given stock of money.

merchants bought sugar and sold their wares in Pernambuco almost exclusively through bills of exchange. This was a way not only to avoid the costs of using specie, but also of providing credit[16]. On the other hand, a number of documents show that on many occasions colonial authorities ordered that remittances of taxes collected in Brazil should be sent to Lisbon by "bills bought here as usual", specifying that metals should be sent only as a last resort. This preference for the use of bills rather than cash remained in place even after the Dutch had considerably reduced their attacks on Portuguese convoys.

Finally, but equally relevant, were the payments made in non-metallic commodities, such as cotton (in particular in the State of Maranhão and Grão-Pará), flour and sugar, the latter being by far the most important, as will be discussed in the next sections. In the sixteenth century, still in the early phases of sugar production, the metropolitan authorities would rather receive the tithes from the tax collectors in sugar than in cash. The king argued that as there was not much money in the colony, the price of sugar would be low. He could sell the sugar at a profit in Lisbon. At that time, the price of sugar in Europe was around three times higher than in Brazil, which explains the preference of the king[17]. In such a case, one can say that sugar did not act as money, but as a mere commodity[18]

The most accepted explanation for the use of non-metallic currencies in the Western World since the Middle Ages has been the fact that periodically and locally there has been a shortage of metals to be coined, either for technical and political reasons or for

[16] Moreira (1990) explains in detail how the merchants from Viana do Castelo made use of bills of exchange – "*cartas missivas de crédito*" or simply "*letras*" – in their dealing in Brazil and other parts of the Portuguese Empire. Bills of exchange drawn by Jesuits responsible for the Engenho Sergipe do Conde on Lisbon in the first half of the 17th century are reproduced in IAA (1956).

[17] DHBN. Treslado de outra Carta de El-Rei para o Governador D. Duarte da Costa a respeito das ditas receitas. Lisboa, 1º de Dezembro de 1554.

[18] "Perhaps a city merchant could hardly distinguish between commodity money (which he planned to pass on with perhaps little or no gain or loss) and his main stock-in-trade. When for instance his country customers settled their accounts by sending him wheat, presumably this was commodity money if he intended it for creditors, but stock-in-trade if he loaded it on his ships in hope of profitable sale in the 'sugar islands'." (Baxter, 2004)

some kind of flaw in minting laws.[19] Claire Priest, in her analysis of currency policies in colonial New England, makes an interesting distinction between commodities of an ample international (and therefore secure resale) market, such as tobacco, and products less suited to serve as currency – the so-called "country pay", such as beef, wheat and pork. Tobacco thus became the commodity money in Virginia and Maryland because these two colonies specialized in exporting that product, whereas in some other colonies "country pay" was accepted in payment of public debts (Priest, 2001). In Brazil, a distinction could be made between, on the one hand, sugar and, on a lesser scale, flour and *cachaça*[20], and, on the other hand, the "drugs of the land" such as straw and salt, mentioned respectively by Simonsen (1937) and Aguiar (1972) as products used as means of payments in São Paulo and Salvador.

Causes and consequences of scarcity of specie

For most of the 17th century, and particularly after the creation of the General Company of Commerce in 1649, sugar-mill owners and other colonists bitterly complained about the metropolitan merchants' prices and practices. These merchants or their representatives who came with the fleets not only had the monopoly on certain important products, but would also agree in advance among themselves to offer low prices for sugar. The colonists blamed "the excesses committed by the merchants", together with the high taxes imposed on producers and on consumption goods, as the main cause for the scarcity of money.

Most historians, not only in Brazil but also elsewhere, have tended to subscribe to this contemporaneous viewpoint. The British historian B. E. Supple, and more recently the Canadian Angela Redish, among others, have offered an alternative explanation "to either 'an external drain' or 'mercantilist paranoia'", as Redish (1984, p. 728) puts it. She argues that

> The Canadian coinage was lacking in quality rather than in quantity (…) This situation arose from a combination of Gresham's Law and the Currency

[19] See, for example, Cipolla (1956). Davies (2002) rightly argues that there was no uniform, chronological "evolution" from barter to "primitive" money and then to metallic money.
[20] *Cachaça* is an alcoholic beverage made from sugarcane.

> Laws of the Canadian colonies (…) The currency legislation of the provinces implied that specie circulation in the Canadas would be small silver coins that were often clipped[21]. This poor quality coin and the premia that were observed on better monies led to complaints about the scarcity of good money (Idem, pp. 714-28).

Supple (1957), commenting on the monetary situation in England at the end of the 16th and the beginning of the 17th century, also points out the harmful effects of bimetallism, such as monetary wars (devaluations and changes in gold/silver relations) and evasion of one or the other metal. These facts gave rise to complaints about monetary shortages. The metal used by merchants was silver, in particular when making low-value payments. As silver became rare, and also due to the wear and tear of the coins, the coins in circulation became increasingly debased, that is, the silver coins were seen as bad-quality coins, while gold was being hoarded. After the "Great Recoinage",

> "arising from the bimetallic movements (…) a substitution of gold for silver considerably lowers the velocity of circulation, while reducing the amount of coin for everyday transactions (…) There is no doubt that it was this phenomenon which underlay so many contemporary complaints concerning a 'scarcity of money'. This is not to say that there was not considerable confusion and laxity in the use of terminology. The phrase was used to mean tight credit, rising interest rates, and a growth in bankruptcies; (…) it was employed as a generic expression for poverty and for the manifestation of a typically depressed economy, and, in addition, it could refer to the over-all loss of treasure resulting from an unfavourable balance of trade." (p. 244-5).

The above arguments put forward by Redish and Supple, though referring to different historical realities seem to fit the monetary challenges faced by the local colonial authorities in Brazil during the 17th century. The general downward tendency of the price of sugar which resulted from the so-called general crisis of the 17th century,

[21] Still according to Redish (1984), the clipping could represent a means of matching the extrinsic (nominal) value of the coins to their intrinsic (market) value.

contributed to the increasing indebtedness of producers[22], who, unable to honour their debts in cash, were being forced to pay them in sugar. The complaint of the sugar-mill owners was that the creditors (i.e., the merchants) established the price of sugar at values well below what they considered "fair". Consequently, the producers faced a deteriorating financial situation, irrespective of the fact that the original debts were contracted in *réis* or in "sugar as it is worth in cash".

Periods of economic crisis in Europe, during which the prices of the main Brazilian products usually fell, made things worse. The colonists protested against the merchants who preferred to take money instead of carrying sugar to Lisbon. In 1679, for example, the merchants alleged that they would rather lose "two *vinténs* in each *pataca*"[23] when selling their wares for cash than lose money in the sugar business in Portugal.

The economic scene depicted in the above paragraph was not peculiar to the Brazilian case. As argued by Peter Mathias, in Early-Modern Europe there was a clear link between, on the one hand, a fall in international prices resulting from economic or political crises and, on the other hand, credit squeezes and money shortages:

> The need for such extensions of credit, however, could prove to be hazardous when credit was tight and where commercial and financial confidence had lapsed, propelling a rush for liquidity. Then merchants, bankers and lenders in general would demand to get back into cash to protect their own positions and the demands for liquidity being made on them by their own creditors (Mathias, 2000, p. 24).

Another consequence of this "flight to liquidity" was that commodities were negotiated only at a discount (Mathias, idem).

In Brazil, according to Schwartz (1988), many transactions were carried out through various forms of credit. As traders charged a premium for these operations, the sugar producers blamed the lack of currency as the fundamental reason for their indebtedness

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[22] In Rio de Janeiro, in the period between 1650 and 1660, the debts assumed by the sugar-plantation owners were 70% higher than their credits to merchants and institutions (Sampaio, 2003, table 1).

[23] This is a reference to the fact that the colonial authorities had recently promoted an enhancement of 40 *réis* (or two *vinténs*) of the *patacas*, which were the most common coins used in payments.

and sought continuously for ways to change the conditions that caused it. Among them were the enhancement of the currency and the establishment of a proper mint in the colony, which they believed would reduce their debts in real terms and help to retain specie. Another measure, as we have highlighted earlier, would be the use of sugar as currency at a previously set price, which would serve as a kind of "minimum-price policy" for sugar, insofar as the debts contracted in a given year were often paid with part of the following crop.

Monetary circulation and sugar as means of payment in the 17th century

In Bahia, as early as 1608, sugar-mill owners were demanding that the local authorities fix the price of sugar (Schwartz, 1988). On that occasion they were facing difficulties to pay their debts and wanted a three-year moratorium, as well as limits to the executions of mortgages. The lack of currency only indirectly justifies such demands, as discussed below. The short-term problem was that their creditors, that is, the merchants, would only take sugar at considerably reduced prices. At least since 1626 the *Camara* of Salvador had the final say on the price of sugar, either putting into effect the price reached after negotiations between producers and traders (a system called *louvado*) or arbitrarily, when the parties failed to reach an agreement.

Frederic Mauro is among those authors who explain the use of sugar as commodity money as a consequence of the scarcity of coins: “in Brazil, at the end of the 16th century, metallic money is still rare. (...) In Rio de Janeiro, in 1614, the governor imposed sugar as a truly legal currency, fixing its value and declaring it unlimited legal tender” (Mauro, 1997, vol. 2, p.136). His source is the book *O Rio de Janeiro no Século XVII*, by Vivaldo Coaracy, who, referring to events that occurred in 1653, added: “due to the scarcity of ready money, since the times of [the governor] Constantino Menelau [1614] sugar circulated as currency in Rio de Janeiro” (Coaracy, 1965, p. 146).

However, it is a well-known fact that there was intense trade between the port of Buenos Aires and the main Brazilian ports, particularly from the last two decades of the 16th century until at least the third decade of the following century. Such trade motivated a strong inflow of precious metals, coined or otherwise, into Portuguese

America. The same Frederic Mauro (idem, p. 174) has stressed that "above all before 1640, Potosi's silver, taking the route of the Rio de la Plata, spreads itself, legally or not, over Brazil"[24].

All the main coastal towns were along this route. In a letter written to his brother in Europe in 1596, a Portuguese merchant in Rio de Janeiro informs that "the Peruleiros or merchants of Peru, which dwell there, come down to this harbour and river of January and bring with them 15,000 and 20,000 *ducats* in rials and plates of gold, and employ it here in this river in commodities; when there are no commodities to be had for money in this place, then these merchants of Peru are constrained to go to Bahia and Pernambuco, and there to employ their money" (Boxer, 1952, pp. 75-6). Visiting Salvador in 1612, Pyrard de Laval, a French merchant, was surprised by the huge amount of silver coins of Spanish America origin which circulated in the town (Simonsen, 1938). Also according to Lessa (2000, p. 42), "since the beginning Rio became a stronghold of reserves of precious metals...".

If indeed there was no shortage of specie, why then did the governor of Rio de Janeiro arbitrarily set the price of sugar in 1614 and make it a compulsory means of payment? Most probably, two not disconnected facts may explain the governor's decision: first, the adverse international economic environment, which was depressing the price of sugar; and second, the fact that a great number of contracts required payment in sugar "according to its price in cash", that is, the "market" price, the one being fixed, as already mentioned, only after a prolonged process of bargaining between creditors (usually Portuguese merchants or their local representatives) and debtors (usually sugar planters and sugar-mill owners).

In fact, between 1611 and 1614 the sugar price, in Bahia, fell sharply. According to data presented by Schwartz (1988, p.400), it fell from 1.287 *réis* in 1611 to 1.000 *réis* in 1614, which was exactly the amount stipulated by the Governor of Rio de Janeiro that year[25]. The decision to fix the price of sugar above that desired by merchants could have

[24] The best analysis so far of such commerce can be founded in Canabrava (1984).

[25] It is worth stressing this coincidence of prices, considering the fact that, as pointed out by Fragoso (2002), the sugar produced in Rio was said to be of lower quality than that produced in Bahia and Pernambuco.

been a way to compensate producers, who were then in control of the local *Camara* (Lobo, 1975, p. 52). The disputes between merchants and sugar-mill owners perhaps started at this time, and "in 1614, the latter managed to obtain a debt moratorium that much upset the former. (...) Traders and sugar-mill owners, two different groups in collision at least since 1614 " (Costa, 2002, p. 55)[26].

In addition to all that, as informed by Vivaldo Coaracy, "a spontaneous system of exchange, or bargaining, of products as instruments of commerce, was established in Rio de Janeiro. The absence of regulation on those transactions gave rise to innumerous abuses and discords" (Coaracy, op. cit., p. 39). The decision to fix the price of sugar according to its quality and to enforce its acceptance as current money was taken in order to "remedy these ills". "These ills" resulted from the practice of writing contracts that promised payment "in sugar as it is worth in cash", which of course created opportunities for "abuses and discords". Contracts with this kind of clause were generally made between traders and producers of sugar, or between members of each of these groups. Accordingly, the setting of the price of sugar by the authorities represented a political decision that could benefit a particular social group, but by setting the price of sugar the authorities were also mitigating conflicts and therefore allowing a more speedy flow of trade and reducing transaction costs[27].

However, the disputes between foreign merchants and sugar producers over debt contracts persisted. Visiting the captaincy in 1624, a high member of the Judiciary sent from Bahia decided that since there were doubts in the captaincy about payments in sugar and the price of the product, the value of sugar would be set by the local *Camara*, and that all debts, except those originated from loans made in metallic currency could be settled in sugar at that price. The *Camara* would meet once a year, in June, to decide

[26] Leonor Costa (2002) has argued that up to the first decade of the 17th century, sugar producers and merchants operating in Pernambuco and Bahia belonged to the same network. According to Evaldo Melo, the conflicting relationship between these two social groups was more pronounced in Pernambuco than in other parts of Brazil (Mello, 2003).

[27] The fixing of the price, however, did not resolve all quarrels, to the extent that there were also disputes concerning the quality of sugars – naturally, the producers tried to pass on to their creditors sugar of inferior quality.

on the price to be attributed to sugar[28]. The decision to allow payment in sugar was explicitly justified as a means to put an end to "the excesses that merchants commit in their sales"[29]. There was no mention of a possible currency shortage, which of course does not necessarily mean that the problem did not exist[30].

Up until then, the European merchants used to exchange their wares for sugar, or vice-versa. In February 1641, however, they were willing to pay 1$000 (one thousand *réis*) for an arroba of white sugar, a price considered too low by producers in Rio de Janeiro. Hence, the fleet was retained in port. The local *Camara* then decided it "to be in the interest of all and so the fleet could depart, that the sugar should be exchanged at the price of four *pesos* [1280 *réis*]".

In a little less than two years (November 1642), a similar episode took place, even though the numbers were different and indicated a deep deterioration of the economic environment. The "masters of vessels and all those concerned with buying sugar for the Kingdom would have formed a monopoly and convenience between themselves", having decided not to buy sugar nor to accept it in repayment of debts but at a price deemed so low as to make it seem impossible for the sugar producers to survive. They claimed that the lack of currency increased the bargaining power of the merchants, who were offering only 400 *réis* for white sugar. In short, as the producers had no money to pay their debts or buy the *mercancias*, they had to make payments in sugar, whose value had been arbitrarily reduced by the Portuguese merchants. The latter, according to news from non-specified sources, could resell in Lisbon the white sugar produced in Rio for 2,000 *réis* and for 2,200 the sugar bought in the captaincy of Bahia[31]. In an attempt to

[28] Tourinho, Eduardo. *Autos de Correições de Ouvidores do Rio de Janeiro, 1624-1699*. Vol 1. Rio de Janeiro: Officinas Graphicas do Jornal do Brasil, 1919, p 7.
[29] Idem. Ibidem.
[30] In the following year, maybe as a result of this visit, the price of sugar in Rio was set at 800 *réis* (Coaracy, op. cit. p. 65). Considering the fact that the sugar produced in Rio was of bad quality and usually cost less than Bahian sugar, it may come as a surprise to realize that the price set in Rio was higher than that received by Bahian producers in that year (675 *réis*, according to data presented by Schwartz, 1988).
[31] According to a "warning for the conservation of Brazil's State sent to el-REI by Lourenço de Brito" (who participated in the joint Governors General in 1641), dated 29/03/1644, the situation was entirely different. The price of sugar in Brazil rose, while it was falling in the Kingdom, and the difference was

confront the metropolitan merchants, the “good men and noble people of the captaincy” appealed to the local *Camara*, which was controlled by the sugar-mill owners and farmers. They demanded that, in order for them “to be able to carry on living and to pay their debts, because otherwise the sugar mills and the farms will be empty and without capital”, the price of sugar should be officially set at 800 *réis*, and that “for such a price the creditors will be forced to accept it in payment of debts as if it was current money”. Both the local authorities and the king’s representative subscribed that demand.

In Salvador, also in 1642, the local Council informed the king that due to the lack of money, which was being sent to Portugal by the merchants, there occurred a sharp drop in the price of sugar and other products. The Council requested "pricing the sugar so that the residents could pay their creditors". Government officials, businessmen and “persons of better talent" were then called to attend a meeting where, after deliberations, the terms of the agreement on the price of sugar and its use as money in debt payments were announced: white sugar was set at one thousand *réis* an *arroba*. The governor and the bishop were among those who signed the agreement[32].

A similar procedure was repeated countless times throughout the 17th century and during at least the first decades of the next century in Bahia (Schwartz, op cit.; Russell-Wood, 1981). The values established for sugar were usually well above those that prevailed in "coins current in this State", and could vary greatly from year to year, as they were generally valid only while the fleet remained in port (or until business was finalized). In 1697, for example, the king ordered the Bahian Senate to gather together producers and merchants so that “within three days they would *adjust* the price that sugar must be accepted according to its qualities ... ". After 15 days, as they had not reached an agreement, João da Rocha Pita, Chancellor of Justice, “adjusted” the price of sugar at 1,500 *réis* an *arroba* of white sugar and in 700 *réis* of brown sugar.

In May 1698 a *junta* was again formed and once again there was no agreement; as the fleet had to depart no later than the beginning of June, the same Rocha Pita set the price of white sugar at 1.200 *réis* and that of brown at 600 *réis* (DHBN, vol. 87, 1950, pp. 6-

only 20%. Therefore the merchants were not purchasing sugar, and sending to Lisbon the money they could get for the selling of their wares (Rau, 1956-8).

[32] DHAM. Atas da Câmara 1641-1649. 2º vol., AMS, pp. 66-74.

7). It should be noted that in those years there was no "currency shortage" in Bahia, since the mint (installed in Salvador, where it started operations in 1695) had already produced a quantity of coins much greater than the amount considered necessary even by the local authorities (Lima, 2005b).

Also in Pernambuco, where conflicts between sugar-mill owners (the “nobles”) and merchants (the “*mascates*”) were more acute, negotiations between the two social groups about fixing the price of sugar took place from the early 1690s (Mello 2003).

In Rio de Janeiro, this *louvado* system was maintained at least until the last decades of the 17th century. In June 1698, officers of the Senate of Rio de Janeiro wrote to the King "about whether to grant them that the Governor, the Ombudsman and finance officials will attend the opening in the Senate of the sugar prices”, since the King, in a letter of January of that year, had "deprived them (...) the benefit with which the Senate for many years had celebrated the sugar prices...”[33].

What this system of fixing an official sugar price in all the different cities had in common was the participation of both sides -- that is, producers and merchants -- in the negotiations, as well as the fact that the established price would have to be accepted by creditors, except when the original loan had been extended in cash. However, it is possible that these agreements may not always have been honoured, and that in times of crisis the price effectively practiced was below the established one (Schwartz, 1988). But it was for the official price that the Royal Treasury accepted sugar in payment of taxes and contributions.

Conclusion

This article aimed at questioning the assertion, frequently made in literature on the economic history of Brazil, that sugar was used as a means of payment because of the lack of circulating coins, particularly in the period preceding the discovery of gold in Minas Gerais. We have tried to show that, at least on some of the occasions on which the authorities set the price of sugar and imposed it as legal tender, the primary

[33] AHU. 1.1.22, p. 335, 335v.

motivation was not the shortage of cash. The use of sugar as a means of payment predated the sharp reduction of specie that resulted from the Dutch attacks and occupation of the Northeastern part of Brazil, a fact that would suggest that sugar did not play the role of money substitute. Until the mid-1620s, the supply of coins was most probably more than sufficient to meet the demand, though small change was indeed scarce. In addition, a considerable part of the transactions carried out at the time of the arrival of the fleets were implemented through bills of exchange.

At the end of the 17th century, complaints about the “want of money” were at their peak, as were the adverse effects of the international economic crisis on the sugar economy. However, the scarcity of specie may well have been disproved by the workings of the newly established mint, which in 1695-7 produced roughly twice as much coin as expected. This fact seems to indicate that hoarding was then a common practice: just before the start of operations at the mint, both silver and gold coins had been enhanced by 30%.

In the meantime, the fixing of the price of sugar following agreements between producers and merchants sponsored by the local authorities solved, or at least mitigated, the two types of problems mentioned by Vivaldo Coaracy and Frederic Mauro in their analyses of the facts occurring in Rio de Janeiro 1614. The first was "abuse", i.e. the fact that, according to producers, the traders (or their representatives) that came with the fleets were almost always in better conditions to impose a low price for sugar, making it hard to pay debts and purchase imported goods. The second type of problem concerned the "discords". Contracts that stated that payments should be made “in sugar as it worth in cash” provoked disagreements difficult to resolve without delaying the departure of the fleets – the expression “everything was at a standstill” is often mentioned in documents of the period.

Accordingly, the adoption of sugar as currency was not directly related to the shortage of coins, and should be understood primarily as a political artifice used to mediate conflicts in order to reduce transaction costs and uncertainty.

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