NOTES

Natural Economies or Money Economies? Silver Production and Monetary Circulation in Spanish America (Late XVI Early XVII Centuries)

Jorge Daniel Gelman
E.H.E.S.S., Paris

The purpose of this paper is to determine if the production and trade in precious metals, in particular from the Potosi mines, affected the whole southern cone of Spanish America in the late XVI and early XVII centuries, thereby introducing throughout the region a monetized economy. We shall start by considering the output of the Potosi mines, then the volume of coin that was minted, and finally the destination of this money. The principal problem is to discover in what proportion the silver stayed in America, and in what types of transactions it was used. We shall consider the economy of Buenos Aires in the first half of the XVII century, which will then be compared with that of other regions — Potosi, Cordoba and Paraguay.

From the end of the XVIth century (1570-70) Potosi had become the main centre of silver production in Latin America and was to retain that position over a long period. The methods of production were crude, relying first on a traditional furnace which was subsequently modified with a special form of chimney invented by an ingeneer from Seville. But despite these primitive methods, the production was still considerable — and direct evidence of this is provided in the eye-witness account by Luis Capoche in *Relacion de la Villa Imperial de Potosi*.[1] He records that from the time of the discovery of the *Cerro Ricco* down to 1574, some 76 million silver *pesos* had been produced. In the 1570s production had increased due to the utilization of mercury

[1] Published by Lewis Hanke (Madrid, 1959).

amalgams ' and this expansion continued until 1620, which seems to mark the beginning of a slow persistent decline in production at Potosi.

According to Capoche, between 1574 and 1585 — a period of just eleven years — 34,715,215 pesos were minted, which was clearly an advance on the earlier period.[2] His figures are based on the registers of the royal tax (*quinto real*) levied on the silver mined at Potosi between 1570 and 1584 — and although these theoretically amounted to one-fifth of the silver mined, the output would have been rather higher since the *mineros* always tried to avoid the tax and find ways of selling their silver illegally. The figures are as follows:

1570	177,275 pesos
1571	167,864 „
1572	129,532 „
1573	105,926 „
1574	193,786 „
1575	256,732 „
1576	336,144 „
1577	475,483 „
1578	530,021 „
1579	688,164 „
1580	749,516 „
1581	802,923 „
1582	860,729 „
1583	768,599 „
1584	764,143 „

These figures clearly reveal the striking increase in silver production: the slight fall in 1583/4 was probably not due to any reduction in production but was caused by problems regarding the minting 'mills' as Capoche explained.[3] And production continued to grow until after the turn of the century.

As far as ownership and methods of production are concerned, as a general rule the sub-soil belonged to the king, who ceded it to the *mineros*. According to Capoche there were 577 *mineros* organized around 94 different seams. Among them were many leading city administrators, some foreigners and even a few natives. The methods of mining had initially been simple and democratic, but when the richest seams were worked out the process became more costly and complicated and encouraged the development of larger enterprises: on the one hand, the big concessionaires who disposed of a native workforce; on the other, the silver mill owners who purchased the ore at low cost directly from the producers. There were also certain natives who either worked on a casual basis on their own account or in return for wages — they would collect the ore and sell it either at the exit from the mines to the leading proprietors or else take it to the special market that had been established in

[2] *Ibid.*, p. 51.
[3] *Ibid.*, p. 177.

Potosi. But what is of more importance for our present purpose than the system of mining — which relied primarily on the exploitation of Indian labour (Fray Domingo de Santo Tomas said: 'it is not silver that we send to Spain, but the sweat and blood of the Indians!') — is the destination of this silver and the uses to which it was put.

Once the silver had been extracted from the ore by mixing it with mercury, it had to be taken to the authorities for assaying, at which time it was stamped with the royal seal and the *quinto* was paid. Since the owners did not like handing over a fifth of their wealth to the Crown, this by no means always occurred and an illegal currency which had not been subjected to the *quinto* came into being — a currency that could only be used in illicit trade. As we shall see, it was to play an important role in the Buenos Aires contraband trade. The taxed silver, on the other hand, could be used either in the form of ingots or else could be taken to the mint, which was run by the Spanish Crown. The first mint was established at Lima in 1566, but it was not a success since the owners were reluctant to send their silver so far away at considerable cost. It was not until 1572 that a mint was opened at Potosi, and it did not start to strike coin in any significant quantity until the following decade.

In theory, the mint was obliged to strike a carefully specified number of coins from each bar of silver. These quantities were laid down in repeated government ordinances, which also stipulated the denominations of the coins: that is 8 reales (known as the *peso corriente*) 4 reales ("real de 4" or *medio peso*), 2 reales, 1 real and ½ real. As can be seen, the Crown showed little interest in creating small currency; the smallest coin permitted was the half-real which was far too large for most day to day purchases. For example in Buenos Aires in 1608 you could buy ten pounds of meat for 0.32 reales.

It was not until the end of the XVIIIth century that the mints began to produce a new *cuartillas* (= ¼ reale) and even then they were rare. The reason that the Crown did not want to see the production of small silver coins was that it preferred that the silver go to Spain. In this the local authorities, the administrations of the mints, and the local ruling classes proved to be 'more royalist than the king.' In the case of the mint, this was because the workers were paid on the basis of a fixed percentage of the quantity of silver that they turned into coin: they therefore received the same money for making large and small coins, but the latter were much dearer to produce while the labour required was in each case the same. That is one reason why small coins are rare in this period. In fact very few one real or half real coins were struck — the majority were 4 and 8 reales.

The local ruling classes also benefited from the absence of small coinage which enabled them to increase the exploitation of the Indian labour force. The mine operators and *encomenderos* gained further profits by paying the workers either in kind, with products whose value they set arbitrarily themselves, or else with various forms of chits (*fichas*) which the Indians were

then obliged to exchange in the 'company store'. On the rare occasion, when an Indian came to possess a silver coin of two or more reales, he would be forced to purchase much more than he needed.

The first general conclusion that we can draw from these points is that the absence of small coinage effectively placed a part of the population outside the monetary system. Not only did this mean that part of the population never used money, but also that amongst the wealthier classes money was only used in commercial transactions of some importance, and not in day to day business, as we shall see.

In fact, the greater part of the Potosi silver found its way to Europe and especially to Spain. According to Soetbeer's calculations, the average annual production in America between 1560 and 1640 was 320 tons a year. Hamilton's figures on Spanish silver imports give an average of 185 tons per annum.[4] Although the two sets of figures (especially the first) are estimates, they do indicate relative magnitudes, and are generally confirmed by more recent research which has illustrated the scale of the contraband silver trade conducted with Holland, Brazil and even China — to mention only the main destinations.

In other words, this enormous silver production did not automatically result in the creation of a money-based economy in Latin America since the greater part of the metal left the continent. But we must not rush to hasty conclusions; the problem needs to be examined a little more closely. The fact that most of the metal left the Americas does not mean that it was not also used there. At least one part certainly was taken out straight away — this was the *quinto*, the royal levy of a fifth ad valorem, which performed no monetary function until it reached Spain. But the remainder, even though it too left America, performed a monetary function in the manner of its leaving — since it was employed in commerce. Certainly, this is a monetary function only in a rather elementary sense and does not imply either savings or capitalization.

Although the silver was continually exported to Europe and Asia, enough was still produced in the American mines, Potosi in particular, to meet the needs of local trade. Problems only arose when production fell, and it was at such times that one realized that the greater part of the silver had disappeared.

In the final analysis, to understand the phenomenon it is not sufficient just to look at the 'horizontal' utilization of money — we must also consider its 'vertical' employment; its use within a given society, by which groups and for what purposes, as well as its wider deployment around the world. Silver and money penetrated into a number of Hispanic American societies but in different ways, depending on their geographical position in relation to the great trade axes and the extent of domestic production of precious metals. We shall examine a number of different examples, starting with that of Buenos Aires.

---

[4] P. VILAR, *Or et monnaie dans l'histoire* (Paris, 1978) p. 168.

The monedas de la tierra

Before turning to these examples, we must first start with a more general consideration: what do people do if they have no metallic currency? In some cases, pure barter systems are established and goods are exchanged directly for other goods. In the case of more complex societies, where there are groups of wage earners, the employers may use chits, as we mentioned earlier. But there is also a third possibility, known in Latin America as *monedas de la tierra*, which constituted an intermediary form between barter and a monetary system proper. These commodity currencies were local products which could be used as general equivalents of value, with the result that the authorities assigned them relatively fixed prices.

All kinds of local currencies were used in Hispanic America. The principal requirements to serve as a unit of account were: *a*) durability and capacity for retaining utility over long periods; *b*) relatively good but not excessive availability — if the commodity was freely available, then clearly it would not be accepted as a monetary standard; *c*) finally such commodities must also be both divisible and groupable (by this we mean that the act of dividing or amassing them must not cause any loss in unit value).

There were many commodities in Latin America which combined these different features and could serve as currency. In Mexico and in Central America, cacao beans were widely used. This was an example of a preconquest tradition continued by the local Indian communities. Normally the authorities set a money equivalent the cacao beans in order to establish relative values. In 1532, for example, 300 beans equalled one real; in 1550, 200 beans equalled a real. But while the official rate was 200 to the real, in practice traders gave only 80 in retail trade.

In the south, where there was very little cacao, other commodities were used as money. In Paraguay, for example, iron was often used for this purpose; at Potosi coca leaves. More generally soap, homespun cloth or tallow are found. These were all in use in Buenos Aires as well. In 1599 Don Rodrigo de Valdes y de la Banda, the governor of Paraguay and Rio de la Plata, recorded in a letter; [5]

> 'The monies used in this region include homespun woollen and cotton cloth, iron and steel. I have sought to eliminate the use of iron and steel because their prices vary upwards and downwards from time to time, encouraging fraud to the particular injury of the Royal Finances. I have let the use of the cloths continue for two reasons: firstly they are abundant, and secondly they have an accepted price which neither rises nor falls'.

This letter points to a very important problem associated with the existence of these *monedas de la tierra*. Since they were dependent not only on their equi-

[5] Cited by C.G. MACEDA, *Economia del Tucuman* (Cordoba, 1963) p. 8.

valent value but also on their use value, they were affected by supply and demand. Iron and steel, for example, had a fixed exchange value used as currency, but when the demand from the Potosi, which used huge quantities in the mine workings, began to increase they could no longer be used as currency. The reason was simple — the use value of the commodities rose much higher than their fixed equivalent value as currency. A reverse phenomenon occurred when the industrial demand for iron and steel declined rapidly. Naturally the same factors also affected metallic currencies, yet the problem was much greater when the use value was so much more direct.

Money in Buenos Aires

The documents relating to the first years of the Buenos Aires settlement suggest that there was originally virtually no metallic currency in use in this port city, and that *monedas de la tierra* were generally employed. The product that most satisfactorily met the prerequisites listed in the previous section was wheat — especially wheat flour, which by virtue of its durability, divisibility and constant utility value was acceptable almost everywhere. A resolution of the *Cabildo* of Buenos Aires in 1589 [6] noted that in view of the absence of metallic currency in the city, all commercial goods should be priced in wheat equivalents, and fixed the money parity at 1 *fanega* of wheat to 2 silver pesos. This meant that all commodities with a fixed silver price could be freely sold for wheat which was the only real currency in Buenos Aires at this time.

For quite some time wheat continued to be used as the *monedas de la tierra*, but this caused a number of problems — the most important being the expansion of wheat exports, especially to Brazil where it was sold at very high prices. The same phenomenon that had affected iron and steel because of the demand at Potosi now occurred, and the utility value of wheat began to outstrip its fixed exchange value. As a result people stopped using it as currency and it was destined for export instead. Only 18 months after having fixed the exchange value of wheat at 1 *fanega* to 2 silver pesos, the *Cabildo* found itself obliged to free the prices of both wheat and maize.[7] But since there was still insufficient metallic currency in the city, they had to find another substitute.

Until the end of the XVIth century *monedas de la tierra* and direct barter were also prevalent in Rio de la Plata. In 1599 the governor Valdes y de la Banda wrote to the king that there was no kind of currency available and that trade

---

[6] ' *Acuerdo del Extinguindo Cabildo de Buenos Aires* (*AECBA*) 9.4.1589, published in *Registro Estadistico de Buenos Aires* (BA, 1863) p. 127.

[7] *AECBA* 17.12.1590, in *Reg. Est. de B.A.* (BA, 1863) p. 157.

could only survive through barter.[8] And although metallic currency gradually began to reach Buenos Aires through international trade, *monedas de la tierra* remained in use throughout the XVIIth century. These were derived mainly from cattle, due to the expansion of livestock raising in the region, and leather became both a major export commodity and a generally accepted unit of exchange in the XVIIth century. It was used in wholesale trade; the great merchants often paid for other goods (both local and imported) and for slaves in leather. It was merchants especially used in retail trade; the owners of the *pulperias* (the town's granaries and foodstores) accepted leather in exchange for all kinds of goods — wine, sugar, *maté*, etc. Subsequently the *pulperos* spent this leather either directly or through the wholesale merchants in international trade.

We find endless complaints against the *pulperos* who had accepted leather that had been ' stolen from the great *estancias* (the cattle ranches) by Indians and black slaves ' to exchange for wine and other goods. In his essay on the *pulperias* of Rio de la Plata, Ricardo R. Molas [9] gives many examples of this — for example, that of a merchant who was fined on the 23rd March 1600 for selling wine for leather stolen by some Indians.

The use of these *monedas de la tierra* was freely maintained by the different individuals and groups who profited from them — starting with the Spanish Crown itself, which was eager to find any means for preventing the export of precious metals from Buenos Aires. It was for this reason, that licences were issued at Buenos Aires enabling the city to exchange its own products for imported goods without recourse to metallic currency. In any case, the Crown failed in its intent because alongside the trade in agricultural products, there was an important and growing illicit trade in which silver — either in bars, coins or powder — was employed more and more frequently.

Metallic Currency

The city of Buenos Aires is strategically situated on the trade routes linking South America with Africa and Europe. A large proportion of this colonial commerce passed through the port, especially the contraband trade. Huge quantities of silver were sent to Buenos Aires from Potosi, either for direct transhipment to Spain or else to purchase goods and slaves from Europe and Africa. At least part of the silver was exported without being subjected to the *quinto*. We know for example that in 1585 the bishop Vitoria sent 30,000 pesos of untaxed silver to Brazil. The value of this metal does not seem to

[8] Letter dated 23.7.1599, published in R. LEVILLIER, *Antecedentes de Politica Economica en el Rio de la Plata* (Madrid, 1915) p. 36.

[9] Santa Fe, 1961, pp. 104.

have been affected by the absence of the royal stamp, and the bishop's agents were able to use these 30,000 silver pesos to buy goods worth 150,000 pesos.[10]

But our more immediate concern is to assess how much of the silver, whether subjected or not to the *quinto*, whether in ingots or other form, remained in Buenos Aires and was absorbed into the local economy. Since the city participated in international trade with its own agricultural products, as well as acting as a port of transit, one can assume that at least part of this silver must have remained in the city and that the activities of the great merchants and local producers served to distribute it throughout society.

One of the main factors that helped keep silver in Buenos Aires lay in the slave trade. Huge numbers of slaves were seized on arrival by the city authorities and later sold at public auction. The greater part of these slaves were paid for with silver from Potosi, which was shared out by the royal treasury, local magistrates, agents of the Crown and informers. In a letter written to the king in 1622, the governor Gongora reported that the sales of slaves during that year had raised 154,095 pesos and 6 reales for the city, whereas only 5,760 pesos had been realised in duties on trade.[11] The royal treasury at that time held 162,449 pesos, of which 138,500 were despatched to Potosi, while 23,970 pesos and 7 reales were kept in Buenos Aires. So although the lion's share was sent to Potosi, this still left a considerable amount of silver in Buenos Aires that would eventually find its way into the local economy.

The Crown's efforts to prevent silver leaving Buenos Aires (which included the creation of a customs station at Cordoba, on the main route from Buenos Aires to Potosi), were never completely successful. Just after the creation of the customs station in 1623, authorisation was given for payment to be made in Potosi silver for a consignment of 232 'pieces of slaves'[12] at an auction in Buenos Aires. The total amount raised by the city on this occasion was no less than 29,000 silver pesos! No less interesting is the report that a certain inhabitant of the city had offered 27,840 silver pesos for the slaves — which proves that there were already people in Buenos Aires who owned enormous hoards of silver. And as the city's reputation as a major holder of silver grew, it founded itself frequently sollicited for assistance by neighbouring administrations facing difficulties in paying their employees. In 1612, for example, in the 'Declaration on the stipend of the governor of Tucuman,'[13] the king's lieutenant stated that if he was unable to find enough money in Tucuman to pay the governor's salary, he would ask for it from Buenos Aires since 'normally there is silver to be had there... as has long been known.'

---

[10] Letter by J.R. Velasco 10.10.1587 published in A.P. Canabrava *O Comercio Portugues no Rio da Prata* (Sao Paolo, 1944) p. 62.

[11] 15.8.1621, published in *Antecedentes de Politica Economica* ... p. 357.

[12] *AECBA* 30.3.1623 in *Reg. Est. de B.A.* (BA, 1865) p. 76.

[13] 28.7.1612, published by Trelles in *Revista del Archivo de B.A.* (BA, 1869) p. 137.

Not only the neighbouring governorships, but especially the local officials in Buenos Aires themselves profited from the silver in the treasury. In a letter dated 1605 [14], Hernendarias, the Governor of Rio de la Plata, reported that he had been able to pay his own salary from the customs receipts and from the bullion raised by the sales of slaves. Other documents show that another governor of Rio de la Plata named Davila withdrew the following amounts of silver from the royal treasury:

19	August 1632	4,384	pesos			
7	September 1633	9,055	„			
14	December 1634	2,985	„			
2	June 1635	7,651	„	and	7	reales
19	April 1636	10,697	„	„	2½	„
6	December 1636	5,235	„	„	5	„

In other words, during his four and a half year service as governor, he had appropriated for his own use 40,009 pesos and 4 reales. And when Hernendarias was subjected to a *Juicio de Residencia*, he was accused of possessing a large number of gold and silver objects, plus 50,000 silver pesos.[15]

All this serves to show that the senior administrators were among the leading beneficiaries of the silver that was present in Buenos Aires — but they were not the only ones. The merchants, and above all the contraband merchants, also held great stocks of silver. For example, one of the leading smugglers of this period, a Portuguese merchant named Diego de Zega, in 1630 paid 37,510 gold pesos to be released from gaol! When his daughter married Don Pedro Roxas y Azevedo (who came originally from Tenerife, but was now a *vecino* of Buenos Aires) she received as dowry the sum of 6,500 pesos, of which 3,200 were in coins of 8 and 4 reales.[16]

Another senior official (who was also a partner of the smuggler Diego de Zega) was Juan de Vergara. When his daughter married Don Juan de Bracamonte he gave her as dowry the sum of 15,000 pesos, of which 2,000 were in silver reales, 1,026 in gold artifacts, and 574 in registered silver.[17]

In conclusion, therefore, we can say that in a variety of ways, but particularly through trade and contraband, silver found its way into Buenos Aires. The presence of this silver was frequently remarked on — in 1608 for example, the *Cabildo* requested of the Crown that the city be permitted to export leather and registered silver.[18] In a report on Buenos Aires between

---

[14] 14.6.1605 in *Reg. Est. de B.A.* (BA 1860) p. 51.

[15] In *Revista del Archivo...* vol. I, p. 235 ff.

[16] Ms. *Archivo General de la Nacion* (BA) 4.9.1626 — section *Colonia*, sala IX, 15-4-6, vol. I.

[17] *Ibid.*, 13.7.1610.

[18] *AECBA* 23.6.1608 in *Reg. Est de B.A.* (BA, 1865) p. 119.

1606 and 1608, Hernendarias informed the king of the arrival of a pirate ship that had been attracted by the abundance of silver both in the royal treasury and in private houses 'where normally much silver is to be found.'[19]

The silver was used mainly in major trading operations, and for the purchase of administrative and political offices (which in turn, of course, offered further opportunities for acquiring silver). In 1614, for example, the *Cabildo* sold the office of city notary to G. Medrano for 7,500 silver pesos.[20] In 1632 the city treasury raised 1,300 silver pesos from the sale of the post of notary to Alonso Agreda de Vergara.[21]

But in addition to its uses in international trade and in the purchase of offices, was silver also used in the city's domestic trade? The most likely answer is that silver was indeed used, but not exclusively and that the parallel use of *monedas de tierra* continued as well. The use of silver is evident in numerous deeds of land sales in the city and nearby. There are many examples of this in the *Registro Estadistico de Buenos Aires* of 1868: on the 22nd October 1604 a piece of land was sold for 1,605 pesos which were to be paid in 'pieces of eight,' a sum which the seller declared that he had already received. There are numerous examples of similar operations, and even when sales were not actually settled in silver, the silver value was generally specified in the deeds. In a land sale on 5th March 1606, for example, in addition to the cash sum paid in silver pesos, 200 ewes and 4 rams were exchanged for 54 *fanegas* of wheat. Other examples can be found in the *Registro Estadistico de Buenos Aires* for 1870, including a sale of land on the 2nd August 1617 for 380 pesos of which half were paid in cash (p. 17); and various lands bought by Blas de Mora who paid entirely in cash (280 pesos for one lot, 600 pesos for another, etc.).

As far as internal transactions were concerned, then, we find that both metallic currency and *monedas de la tierra* were used. The silver money came into the hands of the *vecinos* of Buenos Aires in various ways, often through transactions with Portuguese residents and non-residents (via land sales, dowries etc.). The Portuguese were generally well supplied with silver, as is shown by the general inventory of their goods and chattels drawn up at the time of their projected expulsion from Buenos Aires in 1643.[22]

But silver was also employed in minor operations in Buenos Aires. In 1602, for example, a collection was made in the city in connection with the 'canonization of St. Isidro of Madrid'[23] which raised 12 pesos of 1 reale in

---

[19] Published in R. LEVILLIER, *Correspondencia de la Ciudad de Buenos Aires con los Reyes de España* Vol. 1 (Madrid, 1918) p. 135.

[20] *AECBA* 28.1.1614 in *Reg. Est. de B.A.* (BA, 1868) p. 44.

[21] Ms. March 1632 *A.G. N.* (BA). *Colonia*, sala IX, 15-4-6, vol. I.

[22] Published in *Revista del Archivo...*, vol. III (BA, 1871).

[23] 13/6/1602, in *Reg. Est. de B.A.* (BA, 1860) p. 55.

silver; 37 pesos of 4 reales in silver to be paid later; 8½ *fanegas* of wheat to be delivered at a later date; 6 *fanegas* of flour to be delivered later. Certain professional people were also paid through collections subscribed by the citizens — as in the case of a collection for the 'barber-surgeon'[24] which amounted to 534 pesos (mainly in silver coin), the contributors to which ranged from the senior magistrate to a cordwainer and a goldsmith.

It would be wrong, however, to draw over-hasty conclusions from these examples, and although silver coinage was used to some extent in local transactions, this was on a much lesser scale than in the case of international trade, and was nearly always accompanied by the continuing use of *monedas de la tierra*. Moreover, the cases that we have mentioned hitherto have concerned exclusively the white inhabitants of Buenos Aires (Spaniard or Portuguese): few negro slaves or Indians ever saw silver coins. They used either *monedas de la tierra* or simple barter to obtain goods (wine, sugar, mate, etc.) from the retail stores (*pulperias*), in exchange for leather, wheat etc.).

As far as the terms 'natural economy' and 'money economy' are concerned, therefore, the following points can be established for Buenos Aires:

1) Types of natural and monetary economies existed side by side (although the local money economy and the international money economy always held the advantage).

2) Metallic currency was used mainly for international trade and for contraband.

3) As a result silver coinage did penetrate into the local economy, but it remained restricted to certain types of economic activity (wholesale trade, land purchases etc.), and was always accompanied by the continuing use of *monedas de la tierra*.

4) Part of the population remained entirely cut off from this monetary exchange. However, these same people, although they did not use metallic currency, did form part of the general economic system (since the slave and Indian labour force was engaged in producing for international trade, which was the basis of Buenos Aires's economy and which was conducted mainly in metallic currency). In that sense the 'non-monetary' relationship between the worker and his master was a function of the wider monetary economy.

The coins most widely used were the pieces of eight and the 4 reales-scale, which meant that the denominations needed for small transactions were virtually non-existent. The use of silver coin in Buenos Aires began around the start of the XVIIth century, but after the creation of the Cordoba customs station it declined (and it seems that production at Potosi also declined). The

---

[24] AECBA du 15/10/1607, in *Reg.Est. de B.A.* (BA, 1865), p. 83.

situation became so difficult that the citizens of Buenos Aires complained that they were finding it impossible to pay the royal taxes. We shall now turn to other examples in South America.

The use of money at Potosi

Potosi is an extreme example of the problem of the relation between natural and money economies in Spanish America. As the principal source of production it was the silver market par excellence. Huge quantities of silver were used every day, millions of silver pesos were drawn off by the authorities and even more were spent by individuals who used silver coin and ingots both in local and in international trade. It might even seem that silver was the only money in use, implying the existence of a ' pure money economy '. But the situation must be examined more closely, and we must ask ourselves in particular whether silver was used at all levels of the economy, whether all relations of production had been monetarized.

There can be no doubt that in the sphere of international trade silver ruled supreme. This was also true of retail trade, and it was even used by the Indians who came to possess silver coin in a number of ways. Firstly, because it was customary at Potosi to allow the Indians to work in the mines during their free time, and a few were even mine-operators. But they might come by silver in other ways — there were for example groups of ' free ' Indians who worked in the mines in return for a share of the silver that they mined, and who were entitled to sell it at a market set up for this purpose. Luis Capoche explains how this worked: '... there was a strictly observed custom... that enabled the Indians to sell freely at stipulated public sites the metals that they had mined from the seams.' [25] And although this custom was frequently questioned both by the authorities and by the townsmen of Buenos Aires, it remained in force for a long time.

At first sight it would seem, therefore, that silver circulated abundantly and almost everywhere at Potosi. Capoche again tells us that:

> ' there was no other currency but silver on the *Cerro*; with this metal both the mine operators and the *pongos* (' free Indians ') paid for the food, fruit and drink with which they were supplied. And in return for silver, the Indians sold them their very bodies, and mothers even brought their daughters on to the mountain for the same reason... ' [26].

But the question remains, did the Indians regularly employ silver money? Here a distinction must to be made. It is perfectly clear that the Indians could

---

[25] Luis Capoche, *Relacion de la Villa...*, p. 151.

[26] *Ibid.*, p. 154.

come into possession of silver, but they were forced to sell the ore that they brought out of the mines at very low prices since they were not able to have it milled or purified with mercury. It was also often the case that the Indians who were listed as *metayos* were paid in the form of goods which for them were basic necessities — coca, flour, etc. In fact, the greater part of the Indians lived permanently indebted to the mine operators who had advanced them these necessities, and who subsequently forced them to work without pay. Indeed, the Indians' labour was not 'free' and even more important in most cases their relations with their masters were not monetary. At the same time, there was a widespread barter system in use at Potosi, where coca leaves constituted the *moneda de la tierra*. In short, not even Potosi constituted an example of 'a pure money economy'.

The use of money at Cordoba and Tucuman

Cordoba and Tucuman formed part of the same administrative district and were situated on the main trade routes linking Potosi and Chile with Buenos Aires, and beyond with Africa and Europe. They provide excellent examples of mixed natural and money economies. What follows is based on two principal studies: the first by Ceferino Garzon Maceda entitled *Economia del Tucuman* [27]; the second by C. Sempat Assadourian entitled *El trafico des esclavos en Cordoba 1588-1610*.[28] Both are based on documents from the notarial archives in Cordoba, and reveal very clearly the different forms of exchange used in the period that concerns us.

As we have said, the fundamental feature of these two communities lay in the fact that they were situated on the principal trade route not only for silver exports but also for many other forms of merchandise — among which negro slaves occupied an important place. Unlike Buenos Aires, they had a diversified economy which included farm produce and livestock (this was a major centre for mule-breeding, the principal means of transport) as well as textiles, carts and wagons etc. They employed a much more numerous Indian labour force, making the coexistence of a double economic system — a money economy for the upper classes and a natural economy for the subordinate classes — even more evident.

Before 1590, transactions were conducted entirely either in *monedas de la tierra* or by simple barter. We have some information on the commodities used and their exchange values: in 1585, for example, an *arroba* of tallow was equivalent to one piece of eight; in 1598 one *cara de lienzo* (cotton cloth) was worth 4 reales; a *vara de sayal* (linen cloth) was worth 6 reales. All these products were used as *monedas de la tierra* since they were produced locally and

[27] *Op. cit.*

[28] Cordoba, 1965.

had a direct utility value. The production of textiles was also strictly controlled and the ruling classes well understood their monetary function. We also know that the Indians generally used such currencies or else forms of barter. Moreover the royal authority officially recognised their 'right' to pay taxes in local products.[29]

Higher up the social ladder we find that commercial operations were normally conducted using mixed systems, although international trade was increasingly being carried out on the basis of a metallic currency. In 1589, for example, two slaves were sold in Cordoba for the sum of 1,000 pesos, to be paid half in coin.[30] In 1595, in the case of another sale, the price was 368 pesos, of which 318 were paid in cotton cloth (*varas de lienzo*). In 1596 a slave was bought for 350 pesos, of which 301½ pesos were met by one wagon and a pair of oxen. In 1598, two slaves were purchased with a gold bracelet worth 450 pesos plus 4 pesos in cash. At this level, therefore, the two methods of payment — cash and goods — coexisted.

In the case of international trade, however, cash transactions were the rule. C.S. Assadourian has calculated that in 1590 there were 34 major commercial transactions in Cordoba, with a total value of 17,290 pésos: of these 3,285 pesos were paid in the form of clothing, cloth and other local goods, the rest in metallic coin. This is confirmed by the figures given by C.G. Maceda who shows that between 1590 and 1609 the volume of international transactions in the town amounted to 163,298 pesos — 151,082 pesos of which were paid in cash.

Yet those who used silver money in international trade probably did not do so for domestic transactions. In 1604, for example, Manuel Rodriguez sold Antonio Fernandez Varros '300 head of cattle from his *estancia*... for two black slaves from Angola...'[31] In other words, an example of pure barter.

The use of money in Paraguay

Let us consider one more example. If, as we remarked above, Potosi can be said to lie at one extreme of the exchange systems used in Spanish America, Paraguay lies at the opposite extreme. Isolated by geography from the rest of the continent and surrounded by warlike Indian tribes, Paraguay was characterised by features that were not in themselves unique, but which contrasted sharply with the other regions we have discussed. Since Paraguay was not situated on the routes linking Potosi to Europe, its inhabitants had to make their way to Buenos Aires to obtain whatever goods they might require and to sell their own.

---

[29] *Ibid.*, p. 9.
[30] *Ibid.*, p. 4.
[31] *Ibid.*, p. 29.

The region as a whole was characterized by an almost total absence of metallic currency. An ordinance issued by the founder of Asunción, Domingo Martinez de Irala, in 1541 [32] revealed that all the revenues from royal taxes consisted of swine, poultry, maize and marioc — but that the shortage, indeed the non-existence, of currency had made it impossible to dispose of them for money. The same ordinance also reveals that the absence of money for trade had caused numerous frauds. In an attempt to rectify this, a list of equivalent values in *monedas de la tierra* was drawn up: the commodities were mainly iron utensils (axes, knives, etc.), and it was made compulsory to accept these as currency at the stipulated exchange values. Thereafter, iron utensils formed the principal base for exchange. In August 1544, Irala issued another edict which imposed strict controls over iron foundries, since iron had become 'the real money that circulates in this land.'

By the late XVIth century this was still the case in Paraguay, although iron products no longer provided the only form of currency. The *Cabildo* of Asunción issued an edict on the 12th June 1595 [33] which laid down a list of equivalent values 'that all men must accept.' They were as follows:

1 pound of iron	= ½ peso
1 pound of steel	= 2 pesos
1 pound of wax	= 6 *tomines*
1 pound of *garabata* (sort of rope)	= ½ peso
1 quintal of cotton	= 12 pesos
1 *vara de lienzo* (cotton cloth)	= 1 peso.

The exclusive reliance on these *monedas de la tierra* was not without problems, however, particularly on account of the persistent variations in the real price of the commodities used. It often happened as a result that the fixed exchange price proved to be either higher or lower than the commercial utility price of the same commodity. Another problem also became apparent — when two commodities were exchanged reciprocally, they generally retained their 'money' value: but when the same goods were exchanged for silver, their value tended to fall by as much as half. In 1599, for example, the official value of a *vara de lienzo* was half a peso (4 reales), yet in fact it would only fetch 2 reales for cash in silver coin. And in fact, one governor, R. de Velasco, ordered that prices in *monedas de la tierra* should be reckoned at two-thirds the price paid in silver coin (thereby acknowledging a premium of 33% over *monedas de la tierra*).

The Paraguayan authorities did everything they could to try to draw silver to Asunción and to keep it there. In 1599 Beaumont y Navarra, on behalf

---

[32] S. ZAVALA, "Apuntes historicos de la moneda en Paraguay", *Trimestre Economico* (Mexico City, June 1946), p. 126.

[33] *Ibid.*, p. 129.

of the governor Valdes y de la Banda, ordered that all 'foreign' merchants coming to Paraguay to buy wine, sugar or other goods, should be obliged to pay at least a third of the cost in silver, and that they should be prohibited from taking so much as a silver real out of the town.[34] All revenues in kind raised by the Paraguayan authorities, and all the alms of the religious houses, were sent to Buenos Aires to be exchanged for money or for goods. And since tribute was paid in a wide range of goods, these were often first exchanged in the towns of the 'North' in preference for commodities that were more easily saleable in Buenos Aires.[35]

Therefore it would seem that Paraguay was an exceptional case, since a money economy was virtually unknown in the province at any level of trade or commerce, and exchange remained totally reliant on various *monedas de la tierra.*

A natural economy or a money economy?

After examining these different examples what general conclusions can we draw: was the Spanish American economy essentially 'natural' or 'monetary'?

The first point that must be stressed is of course that there was no *single* Spanish American economy with a set group of characteristics, but rather a number of economic systems whose characteristics were determined largely by geography, particularly access to the main routes of international trade and the principal centres of population and production (especially silver-mining).

We have discussed a number of contrasting examples. At Potosi, silver coin was used even by the Indians, whereas in Paraguay it was not available for anyone. Buenos Aires, Cordoba and Tucuman are somewhere near the centre of the picture, with economies that were typically 'mixed' — yet this type of combination could also be found at Potosi.

One common feature was the absence of a small denomination metallic currency, creating the necessary recourse to other methods of exchange provided by the different *monedas de la tierra* and by barter. But this was not a 'natural' product of the regional economy, but was in fact deliberately perpetuated by the ruling classes who profited from these forms of exchange (which increased their ability to exploit the indigenous labour force). A mixed exchange system (although with a predominant monetary bias) was also in use at the highest level of society while money predominated in international commerce and was also used extensively in internal trade in combination with other forms of exchange.

---

[34] *Ibid.*, p. 134.
[35] *Ibid.*, p. 141.

What must be stressed, however, is that this combination of natural and monetary forms of exchange can only be explained in terms of the latter. As a whole (and leaving aside certain obvious exceptions) the economy was organized from top to bottom in order to meet the needs of an international and highly monetarized commercial system. At the same time one must also bear in mind certain specific features of the Spanish American economy — the fact that the relations of production were not free; the super-exploitation of the labour force; the fact that capital failed to accumulate in the American interior because of the massive export of silver to Europe and Asia.

The economy was then a mixed one: it was a natural *and* a money economy, yet the dominant factor which conditioned all the rest and ordered it to its advantage was large-scale international trade in which silver and metallic currency played a major role. It is evident that such a system which was orientated primarily towards the exterior, in which the level of capitalisation was very low, and which was not organised as a function of the domestic market, was extremely fragile. The result was that the partial monetarization was ephemeral, and a local decline in silver production sufficed to throw the whole system into turmoil. This may help to explain the economic decline which was subsequently to affect regions like Potosi and Tucuman.