<u>Assignat under closer examination</u>

Many are familiar with the story of the French 'assignat' – a 'currency' in C18th France that was 'backed' by land. But why was the currency doomed? Was an 'over-issue' of assignats the reason, or was there a subtler mechanism at work?

The idea of assignats came in the wake of Mr. John Law's attempts at 'monetary reform' which had ended up with the French in ruin. Assignats were an 'instrument backed by land' which came to be used as money. The logic behind such an enterprise was that 'valuable land,' having recently been confiscated from Catholics by the French govt., was in plentiful supply. Land was 'assigned' to assignats, with the 'value of the land backing' assignats.

These assignats were meant to be considered like gold; the logic being that since the land and buildings behind them were worth gold, the 'legal entity' in front of the land, i.e. the assignat, was also worth gold. As soon as assignats went into circulation through 'state expenditure,' they changed hands at a discount to 'face value.' An important facet to consider is that an 'over-issue' of assignats relative to the value of land and buildings wasn't initially done by authorities. So why did notes change hands at such 'discounts' from their beginning?

Imagine a building 'valued at' 1000 gold coins being 'represented legally' by a note which is also 'legally valued' at 1000 gold coins. Even when 'legal structures' remain civil; common, there's still an issue related to *redeemability* of this note *for* 1000 gold coins as well as acceptability of this note for 'face value' up to that point. *Redeemability* here means *manifested exchange and extinguishment* of this note *for* 1000 gold coins. The issue of *redeemability* is related to when, where and how the underlying building might be sold for 1000 gold coins. This cannot be determined. All that we can say is that the regularity with which buildings are bought and sold for gold would be completely different to that for apples or bookcases. Using this note in exchange for goods offered against quantities of gold coins†, if possible without 'state coercion,' would automatically result in an indeterminable but permanent 'discount,' i.e. a greater 'quantity' of 'face value' required relative to the price of goods on offer.

This can be called 'permanent acceptability issues.'

† In greater detail, goods offered against gold coins would be required within N days of exchange. This might be 'two days,' say. The likelihood of the building behind this note being sold for 'its face value' of 1000 gold coins 'within two days' is 'permanently unlikely within two days' as far as someone accepting this note *for* gold coins is concerned. This is manifested through a permanent 'discount' for notes of themselves; meaning, should goods be offered at X gold coins, then $>X$ gold coins as represented by 'legal face value' of this note would consistently be required by sellers.

Wheat arbitrage

As Fekete has elaborated, everything in exchange is a form of *arbitrage*: i.e. converting *overtly different* things into 'one' through exchange. Consider a market maker quoting a two-way wheat price 'at Paris' and another 'at Bordeaux.' Let's denote the former's quotations as $@P$and the latter's as $@B$. These quotations would be of the form $50 \times 9.0\ @P\ 9.1 \times 40$ (in this case, the Paris market maker is willing to offer silver pennies for wheat at a rate of 9p/bushel up to 50 bushels and also offer wheat for silver pennies at a rate of 9.1p/bushel up to 40 bushels.) The difference between offers and bids represents contingency for exchange in warehousing needs; be that warehousing of coins and/or bushels of wheat.

Consider Paris market maker quoting $50 \times 9.0\ @P\ 9.1 \times 40$ and Bordeaux at $50 \times 8.8\ @B\ 8.9 \times 50$. Anyone could take Bordeaux's offer at 8.9p/bushel: i.e. exchange pennies for wheat, to take Paris's bid at 9.0p/bushel: i.e. exchange wheat for pennies, for a surplus of 0.1p per bushel (up to 50 bushels.) However, this isn't the end of the matter, as wheat has to be moved from Bordeaux to Paris and, unless such a task can be carried out alone, any arbitrageur carrying out this exercise would find that the total cost of carriage would approach 0.1p per bushel.

This isn't as illogical as it sounds: the person enacting this arbitrage could be considered as making a two-way market themselves 'across Paris and Bordeaux' with *both* their bids and offers hit *simultaneously* up to carriage between Bordeaux and Paris. Just as the Paris market market's quotation of $50 \times 9.0\ @P\ 9.1 \times 40$ takes into account 'warehousing' or 'carrying' costs between their offer and bid, so the arbitrageur's implicit quotation at $50 \times 8.9\ @B \rightarrow P\ 9.0 \times 50$ takes into account the same (with $@B \rightarrow P$ representing that arbitrageur and their 'region' between Bordeaux and Paris.) These themes will be developed.