An Accounting History of Credit Money

**Key words:** Accounting, money, credit-money, history of central banks, debt, finance, history of credit.

**Abstract:** This article seeks to demonstrate that the invention of double-entry accounting, during the 13th and 14th centuries in the cities of northern Italy, was at the origin of the emergence of our monetary system: the credit money system. By showing the limits of the monetary histories that currently exist, this article shows that these limits are the consequence of a theoretical unthought: that of the different dimensions of money. It then shows that this problem is particularly well defined by double-entry accounting, which explains its decisive historical importance for the history of money.

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The opposition between credit money and commodity money is known to economists and historians. What makes this modern credit money so special is that it is created when private banks grant credit to an individual or a company. The flow of new credit minus the flow of repaid credit for an entire monetary zone gives us the money supply in circulation (excluding foreign exchange transactions). Nowadays, the money supply is therefore a mass of credit in circulation with debts as a counterpart. This definition sheds light on the term "credit money". Commodity money, on the other hand, was characterized by a value per se of money in circulation, generally defined by its value in gold. In the past, therefore, the money supply did not have debts as a counterpart.

But historians and economists do not clearly perceive when and how this modern money appeared, nor when and how it gradually replaced metallic money. Generally, they confuse credit money with scriptural money and consider that it was pure convention that allowed the gradual transition from metallic money to scriptural money. In so doing, they do not explain how credit money itself came into existence and why this system was created. Nor do they explain in conceptual terms what this transition consisted of. They fail to see that what was at stake was a transformation of the fundamental rules of money, a change of dimension, and not just a change in its support. Actually, the promises of money, or the claims of the old currency, have become the modern currency. This is the reason why no history of money traces its evolution in a logical way from the Middle Ages to the present day. Such an undertaking systematically comes up against impassable inconsistencies as long as it has not been identified that the double part has provoked a change in the dimension of money: the transition to modern credit money, starting with the transformation of claims into money.

We could multiply the examples to show that three cases can be observed among historians: First, the case in which the
historian accounts for the evolution of modern credit money. In this case he starts ofenly from the seventeenth century and explains the evolution of the present system by giving money its contemporary definition of a credit system. Excellent works, precise and documented, naturally fall into this category, including a large part of contemporary economic thinking. Secondly, the case of medieval historians who analyze money in the context of coinage, and consider the credit system emerging at that time as a non-monetary system based on it. In general, these historians stop around the seventeenth or eighteenth century, because later the evolution of the monetary system appears to be too complex and too different from their object of research, even if they are extremely precise and documented for the period they cover. Finally, historians covering the whole period systematically fail to give a satisfactory definition of money, either in the vagueness of the explanations or in the unspoken facts. This is not surprising. While the first two types of work move within a single definition of money, adapted to the period they are studying, the third are torn between the two dimensions of money that prevailed successively, which they are unaware of. Thus, they necessarily fail to unify the history of money, because in order to do so they would have to extract the notion of dimensions of money from their historical analysis.

For contemporary credit money, if it functions as a credit system, owes it to the fact that it was originally only credit, claims, based on metallic money. Double-entry accounting, by rationalizing and unifying these promises of payment and metallic money under common rules and thanks to reliable checks, has allowed these claims to be used on a massive scale. Then these claims developed over the centuries until they became completely independent of the metallic money on which they were originally based, as economic actors gained confidence in them, as they felt that their rules of operation mattered more than the metallic money in which they had always placed their trust.
This is how claims based on metallic money have become a currency in their own right, the credit currency we know. And the rules that allowed them to gain the confidence that we today attribute to credit money were given to them by double-entry accounting. It was double-entry accounting that made it possible to change the monetary dimension, to pass from simple metallic money to scriptural credit money. But it is essential to emphasize a fact that escapes the analysis of historians and economists: the fact that there is a third dimension of money. This third dimension is credit based on contemporary credit money, which is therefore a credit system based on a money that functions itself as a credit system. The confusion of the different dimensions of money is at the root of many theoretical problems in economics.

Thus, medieval historians of money and credit, such as Raymond de Roover, do not perceive that the fine and complex credit tools that they brilliantly analyze will in fact become credit money itself. Symmetrically, economists or historians of modern money fail to see that this credit money was born of claims based on metallic money. All fail to discern that contemporary finance, especially the bond markets, are another monetary dimension, a mass of claims based on credit money. Finally, they fail to see that it is the logical structure of double-entry accounting that unifies them in a system of value definition. The complexity and efficiency of double-entry accounting is what places it at the heart of the different dimensions of money: it is it that created them, it is its rules that unify them, it is through it that we can think of them.

In general, modern credit money, poorly isolated conceptually from scriptural money, is considered to be the invention of central banks, especially in neo-classical economic thinking. The first to be recognized as such is the Bank of Amsterdam, created in 1609. For example, Stephen Quinn and William Roberds, in an article published in 2009 in the American Economic Review, consider that the Bank of Amsterdam was the
first to use a unit of account that could only be protected from depreciation by open market operationsiv. According to these authors, this key innovation allowed the gradual introduction of modern money, which functions around this new unit of account that can be called "central bank money", and which would be the basis, even today, of relations between central banks and private banks. The need for the Bank of Amsterdam to protect its official currency against the depreciation and invasion of foreign currencies would have led it to invent the modern unit of accountv. Its success would then have led the other countries of the world to adopt this central bank system, and first and foremost Protestant countries.

But Quinn and Roberds, both representatives of a common representation among many economists, made a mistake in confusing these interventions with the invention of the unit of account that would serve as the basis for modern money. This unit of account was not invented by the Bank of Amsterdam, but simply derived from the logic of double-entry accounting as it had been established in the fourteenth century. When the Bank of Amsterdam opened in 1609, it naturally used this accounting system to manage its deposits as many banks were already doing at that time. However, it is the entries of this system, which is nothing more than a credit system based on metallic money, passed between the accounts of the depositors that allow the existence of modern credit money, and this had already been practiced for a long time.

Indeed, when transfers of claims between correspondents according to the rules of the double game, without displacement of metallic money begin to appear, the possibility of granting these claims in a massive way also appears, in particular from a firm to one of its correspondents. And this possibility exists, it is important to point out, in spite of, and even because of, the prohibition on interest-bearing loans. To do so, it is sufficient to grant a payment period on the sale of an asset, as can be shown
by a simple accounting analysis. In this case the duration of the payment period will correspond to the creation of modern money, albeit in reduced quantity, since this operation will give rise to a debt that can itself be used as a means of payment.

But beyond the history of accounting, we can see that the invention of the double-entry system originated the first modern banks in Italy, which emerged from the transformation of large commercial firms\(^1\). The creation of double-entry accounting thus marked the decisive stage in the invention of modern credit money. Actually, it was even consubstantial with it. In fact, it was because the need for credit was very pressing at that time that the possibility of issuing credit, even if this issue was necessarily secured by the sale of a good, led to the expansion of this technique and its counter-intuitive rules. Moreover, the fact that merchant firms that used the double-entry system could grant and manage numerous credits led them to modify the nature of their activities. From commercial enterprises managing payment deadlines or debt transfers to their correspondents, they became banks granting credit based on the forward sale of goods. There is *de facto* no difference between these two definitions, except that these companies must have had many customers who no longer really wanted to trade with them but rather to obtain credit. This is the reason for the transformation of the large Italian merchant companies of the late Middle Ages into banks. The invention of double-entry accounting was the reason for this evolution.

Later, when the first state banks were created, their purpose was to better control the credit capacity opened by the double-entry accounting, which involved many risks, and all of them used the double-entry accounting. The first central banks did not invent the modern unit of account, they only secured and extended it. This unit of account was already fully defined in the rules of double-entry accounting. It had already given rise to the
development of many private banks and even, this point is important, of public banks, such as the Banco della Piazza di Rialto in Venice, which also managed the treasury of the Venetian State\textsuperscript{iii}. The Bank of Amsterdam therefore used the same system as all the banks of the time at the time of its creation, but tried to secure it in several ways. First by backing it up with the credibility of the city of Amsterdam, and second by supporting the value of its currency, including through open market operations, and this is its real success\textsuperscript{viii}. Indeed, once the stability of Wisselbank and its currency of account was achieved, depositors throughout Europe had an interest in using it as an international banking platform, and this efficiency led other countries to create central banks based on its model.

But the Bank of Amsterdam had first and foremost to guarantee and protect the credit system of the United Provinces, a system that relied as much on the East India Company, the armed and monetary arm of the state charged with making profits in all the Dutch colonies, as on the Wisselbank. Indeed, if bills of exchange had to be paid to the Bank of Amsterdam, if this bank granted advances to the State, it was the East India Company that allowed the issue and massive circulation of bills of exchange from the profit it generated\textsuperscript{ix}. What the double entry system allowed above all was to connect the issue of debt to the rational calculation of profit, which led to a feedback loop that was extremely profitable for the States that used this system, since thanks to it they developed and became richer.

\begin{footnotesize}
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