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## MONEY CREATION: THE ROLE OF TRUST FOR PUBLIC HAPPINESS AND SUSTAINABLE GROWTH

By Nicola Genovese and Maria Grazia La Spada<sup>1</sup>

*The principal topic of this article is the creation of money in primitive populations at the beginning of economic activity. This phenomenon was determined thanks to a particular social environment where interpersonal trust together with reciprocity and moral principles were prevalent. No other explanation obtained by historical studies and neoclassical equilibrium models is sufficient. Principally because they are based on the rationality of self interested individuals. Our analysis can be considered as a historical and theoretical example, which testifies to the necessity to create a social environment based on the above mentioned values for obtaining public happiness and sustainable development.*

*Keywords: Sustainable Development, Public Happiness, Origin of Money, Behaviour Economics, Exchanges Between Primitive Populations*

*JEL classification: Q01, A13, B15, E40*

Our work provides a historical example that lends credence to the validity of the current interdisciplinary studies, called Civil economy [Note 1], which attempts to identify the characteristics of the concept of Public happiness.

Public happiness, according to its scholars, has aspects that are not only a consequence of economic development, as Adam Smith said, but are also necessary conditions for its start and sustainability.

Among these aspects, particular importance is attributed to interpersonal trust, which can give rise to a new kind of rationality (we-rationality), other than the individual one [Note 2].

The example presented here relates to a

historical period starting at the beginning of the development of human economic activity and refers to the advent of the creation of money, which allowed mankind to overcome the difficulties of bartering.

The first part of this contribution highlights the gaps in studies on the phenomenon of the creation of money, both from the historical point of view and mainly from the standpoint of orthodox economic theory.

With regard to the historical approach, there are serious gaps because of the insufficient documents and findings. There is a particular field of study called Numismatics, where a large descriptive aspect prevails, and within which scholars limit their analysis to the study of coins.

Generally speaking, coins have an intrinsic value and therefore limit the role of trust as a fundamental factor in the creation of money. In this case, the role of higher authorities, such as States and religious leaders aiming at increasing trust in money and at appropriating the benefits of seigniorage, is prevalent [Note 3].

The contribution of the Anthropology of money, for the explanation of the phenomenon of money creation, is not fundamental. In this discipline, studies regarding primitive peoples indicate a long list of various elements as a measure of values and perhaps also as means of exchange with no intrinsic value. Their insecurity regarding its use as a means of exchange could be overcome if the role of trust were emphasized. Trust is an important feature in the social environment of these populations. A commodity may be accepted for the payment of goods when there is trust that others will accept it for the purchase of other goods. But the question that must be answered is how such trust is created and how it may be spread among all those who participate in the exchanges.

With regard to the orthodox economic theory of the origin of money, there was a

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rift between the followers of Menger's theory [Note 4], who saw money as an "unwanted" result of rational action by self-interested individual traders, and those who have supported Knapp's State thesis [Note 5].

Only recently the problem of the origins of money has been re-examined by economists. Some theoretical models have been developed giving rise to two generations of contributions.

The first developed in the late 80s, Kiyotaki and Wright's contributions being the most representative. It gave rise to the so-called models of "search and money". The second developed in the early years of the 2000s, the most representative being that of Howitt.

Kiyotaki and Wright make the fundamental contribution, considered as "path breaking". It is based on barter transaction costs, which are exacerbated by the phenomenon of specialization and division of labor. This model would provide a general equilibrium analysis with an infinite time horizon, based on non-cooperative strategic behavior.

Kiyotaki and Wright adopt hypotheses which can be criticized as being too abstract. For example they consider the agents specialized in the production and consumption of goods: every individual, and here only individual action is considered in the tradition of neo-classical theory, self-produces, through an input constituted by a consumer commodity, another that is not compatible with his preferences.

To consume and subsequently produce, he must therefore exchange, entering into contact with agents met "randomly" in pairs and is subject to the constraint of "quid pro quo" and even in this condition there is the prevalence of individual self-interest, typical of Neoclassical theoretical tradition. Besides, as regards the equilibrium with the creation of money, Kiyotaki and Wright are widely criticized because it is not unique:

there is the possibility of multiple equilibriums in the "search and money" model, where monetary equilibrium could be replaced by a barter equilibrium or by an equilibrium based on commodity money.

The above mentioned authors, Kiyotaki and Wright, were aware of this possibility and therefore, perhaps unknowingly, have clearly alluded to the need to consider some social phenomenon, such as customs and traditions of the communities in question, in order to overcome the above mentioned difficulties and to ensure the prevalence of monetary equilibrium. This possibility corresponds fully to the principles of the current scholars of Public happiness, which will be dealt with below and applied to the social phenomenon of the creation of money.

As for the authors who have given birth to a second generation of studies, which go beyond the so-called "search and money" theory, Howitt's attempt is considered closer to reality, because it reduces the difficulties and transaction costs, with the introduction of "trading posts".

Howitt with this hypothesis attempts to reach a situation of equilibrium in which there is only "fiat money" [Note 6]. But this hypothesis means confronting a more advanced social reality and may indicate that in less advanced societies there cannot be creation of money. This is in contrast with the results of historical research, albeit incomplete, which have reported the presence of money also for primitive populations.

Leaving aside other aspects of Howitt's contribution, it is convenient to dwell on only one other assumption adopted by him. Howitt does not consider any cost of production. Therefore, this hypothesis is inconsistent with the closer correspondence to reality of his model, already criticized. But another possible criticism exists, which goes in the opposite direction.

In fact, as the model in question does not

consider costs of production for each individual, it is possible, introducing the concept of trust, to have a reality based on gifts and reciprocity, of which historical investigation provides significant examples.

Now we can speak more precisely about trust and the creation of endogenous money through the choices of single operators in the economic activity.

Given the shortcomings of historical studies and orthodox economic theory with regard to the explanation of the origin of money, the only remaining possibility is to consider the current trend of thought, founded on interdisciplinary contributions, which has, as its subject, the study of Public happiness. One of its fundamental principles is the concept of interpersonal trust, which can help to develop the so-called "we-rationality" and then to study topics that are beyond the dominant theoretical analysis, such as, for example, the behavior of individuals faced with the problem of public goods and the reform and creation of social institutions. Currently these are issues of growing importance, especially in order to develop a correct social environment and sustainable development.

The example presented here is significant, because the great social phenomenon of the creation of endogenous money, which is comparable for mankind to that of language and writing [Note 7], can only be explained using the concept of interpersonal trust. This relationship between people can be found in early communities, made up of small groups, whose members, having passed through the condition of hunters and gatherers, maintained moral behaviors, such as communion, respect for hierarchy, friendship, love and reciprocity [Note 8].

These communities were originally self-sufficient. Due to population growth, the preference to vary diet, according to the principle of diminishing marginal utility, and specialization, which increases the productivity of labor and the need to make

exchanges, as was highlighted by Adam Smith, any community was forced to undertake exchanges with other communities that had the same respect for its moral principles.

It is possible to imagine that the first exchanges occurred in the form of gifts, which were reciprocated, given the inclination to respect the principle of reciprocity. This trend was reinforced by the moral conduct existing in each community, where the granting of gifts was the prevalent way of exchanging goods. In the case of gifts the fundamental basis was constituted by trust and this was reinforced by the persistence of reciprocity. This hypothesis is confirmed by historical research [Note 9]. It is possible to take an item that is interesting for our analysis, regarding a particular type of exchange in which the element of trust prevails.

It seems that Phoenicians landed on the beaches of Mediterranean countries, leaving their goods and then retreating to enable the inhabitants of these countries to choose freely what they needed or meet their preferences. After a certain period of time, the Phoenicians returned and at the place where the goods were taken, they found precious metals, valuable minerals such as obsidian, pearls and other valuable objects, as compensation. This historical event which we learn about from Herodotus (Book IV, 196) is very important because it documents how exchange could have occurred on the basis of gifts for which trust becomes an important aspect. This activity of the Phoenicians was not sporadic, but was pursued over a long period, leading to their commercial success. Of course, this can be attributed to the trust they placed in the behavior of the populations with whom they were in contact. This trust was based on the habit of these populations, even among their own components, to comply with the obligation to reciprocate adequately and sometimes generously received gifts.

In this form of exchange, a measure of value

was not necessary, given that gifts were made and reciprocated with generosity and full knowledge of preferences of all participants.

When the need arose to intensify exchanges and to increase the number of communities with which to trade, thanks to the persistence of interpersonal trust and moral principles in these communities, it was relatively easy to switch to barter and identify a commodity that would allow the prices of all other goods exchanged to be fixed, facilitating the development of trade.

The transition from this phase of exchange to the endogenous creation of money was possible when these communities realized the difficulty of solving the problem of barter, which can be summarized by the necessity of "double coincidence of wants", and the cost of transporting goods for exchange with other goods. The basis for increasing the development of trade with the creation of an endogenous money now existed [Note 10].

What is the key feature of money which enables it to remain in the market, therefore facilitating and enhancing exchanges? It is that all individuals accept money because they are sure that all others will accept it. Such security, especially when it regards fiat money without intrinsic value, certainly comes from mutual trust in the behavior of all participants in the exchange. The other necessary feature is that the prices of goods maintain a satisfactory stability, along with the value of money.

The former feature is based on trust; and such trust, especially in its interpersonal aspects, was present in these communities, at the beginning of economic development, given the moral principles they respected.

In relation to the latter characteristic, the solution was found in adopting as money a commodity not only durable but also easily storable and divisible, for making payments and mainly having the indispensable

condition of not being easy to reproduce. The adoption of shells as means of exchange in places far away from the sea is a significant example.

The creation of endogenous money, as well as that of language and writing, constituted one of the necessary conditions for growth to reach the level of advanced societies.

The analysis presented in this work leads to the conclusion that scholars must put aside the extreme importance given to the principles on traditional theory, such as individual self-interest and the analysis of rational behavior of single operators. Other principles are relevant.

For the present, these principles, such as trust and "we-rationality", still remain valid for new possibilities to ensure the development of economic activity and its sustainability in a correct social environment.

## Notes

[Note 1] Civil economy was also developed by Italian economists such as Zamagni - Bruni (2004), Porta (2004). Antonio Genovesi and other philosophers, followers of the Continental Enlightenment movement, inspired these economists.

[Note 2] The concept of "we-rationality" was elaborated recently by some economists and philosophers, such as Gilbert M. (1989), Sudgen R. (1993,2003), Bacharach M. (1993, 1999, 2006). Sudgen gives a clear idea about the concept of "we-rationality". He writes: "In relation to a particular decisional problem, the individual may consider himself as a member of a group or a team and thinks this problem not as his problem but as the problem for the group. In other words, the individual restructures the problem not as "What should I do?" but as "What should we do?".

[Note 3] To better understand the meaning of seigniorage, regarding the creation of money by Religious and State authorities, where the role of trust and we-rationality is



not determinant, see Buiter (2007).

[Note 4] We criticize the Menger thesis because his theory is based on self-interested individuals. To create the money trust, reciprocity and the we-rationality of operators are necessary.

[Note 5] Knapp (1924) considers the true money created by the State. He underlines the role of the State, which assures the value of money and its circulation by means of legal order.

As regards Numismatics, Knapp made a negative criticism considering this discipline which "usually knows nothing of currency, for it has only to deal with its dead body".

[Note 6] The term "fiat money" indicates the characteristics of money without intrinsic value.

[Note 7] The parallelism between social phenomena, such as language, writing and money was presented by Menger (1871). He is the first economist who considered money as an endogenous result of economic activity of single individuals.

[Note 8] These moral characteristics are identified by Polanyi in his important contributions (1994,1971).

[Note 9] The first citation of gift as exchange is that of Herodotus (Book III, 139-144).

[Note 10] The possibility of an endogenous money in primitive populations has been accepted by important economists such as Samuelson and Keynes. Samuelson (1958) considered seashells as "fiat money" without any intrinsic value like paper pieces. Keynes (1930) refers to stone money as "fiat money".

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