AN ESSAY ON THE NATURE AND TYPES OF MONEY

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Abstract

Money is an important phenomenon that affects the lives of everyone. However, money is one thing that we desire the most, but know the least about. The academic literature on money theory is relatively rich on works about "monetary policy" rather than the nature and types of money. In this work, we have tried to establish a conceptual framework on the nature, features, functions and types of money in order to present an introductory knowledge on the philosophy of money.

Keywords: Money Theory, Money Production, Political Economy, Macroeconomics, Banking.

THE NATURE OF MONEY

There are two types of exchanges in economic life such as direct and indirect. Direct exchange is called barter. X gives 2 loaves of bread to Y in return for 1 liter of milk. Both parties satisfy their needs by one exchange. In indirect exchange however, one party provides the goods or services the other needs while he receives a medium of exchange rather than what he actually wants. This medium of exchange is called money regardless of its physical attributes. The party that receives money gets (buys) the goods and services he need by another indirect exchange.

For example, X gets 1 liter of milk by giving 10 walnuts to Y and Y gets 1 loaf of bread by giving 5 walnuts to Z and keeps the other 5 walnuts for further transactions. This time, X and Y satisfies their needs not by one direct exchange, but two instances of indirect exchange. The medium of exchange i.e. money used for facilitating these indirect exchanges is apparently the walnut.[1]

To recognize which commodity is the money in an exchange, one should look at which of the goods are being taken not by the purpose of consumption. In the example above, Y gets 10 walnuts not for consumption, but for using them in another exchange. No wonder walnuts can be consumed if desired so, but it is possible to say that walnuts gain monetary quality at the rate of being exchanged for the purpose of a medium rather than for the purpose of consumption.[2]

Money is a phenomenon that emerges spontaneously in economic life. The main reasons that cause money to emerge can be summarized in three titles.

1. The Coincidence of Wants Problem

In a society with no medium of exchange, a tailor who wants to get a haircut has to find a barber who wants to have some clothes sewed. Hence in a growing economy, it is almost impossible for economic actors to satisfy all of their needs only by direct exchange. Some commodities will eventually start to be used as a medium of exchange. It is a natural, spontaneous process which cannot be avoided.

2. Indivisible Goods Problem

A person who owns a cow and needs bread and milk will starve in a society with no medium of exchange. He cannot divide it lest he loses a high part of its value. If he sells it in return for 200 breads and 100 liters of milk, most of what he gets will likely to become stale and thus he loses again. So in an economy where such indivisible commodities with a relatively high value exist, money again will eventually emerge.

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[1] Ludwig von Mises (1953). "The Theory of Money & Credit", Yale University Press, p. 30.

[2] Rothbard, Murray N. (1963). "What Has Government Done to Our Money", Ludwig Von Mises Institute (2010), p. 6-10.

3. Storing Value Problem

In a society with no medium of exchange, people can only make use of their products by exchanging them with other goods and services. Hence they would have no means to store value and make savings. In such an economy, no baker can ever buy a cow that worth 400 breads. If he tries to save 10 breads of his daily production, he will never be able to save the necessary amount as breads will become stale over time. So he needs something more durable and suitable for saving in order to store his value by selling his products in return for it. But it needs to be something marketable for others to accept it thinking that they too can use it for buying something else. Hence it is money and it is what people need in order to make savings for future transactions with a greater value.

These are the main reasons that cause money to emerge. These reasons essentially root in the basic human need for sustainable development. Therefore, any community that has more than several goods and services in its economy will eventually start using some commodities as a medium of exchange in economic transactions. So money cannot be subject of discovery since it is not a specific commodity but a quality some goods that people made use of all along with or without knowing its definition or potential.

Things that are used as money are numerous in history. Some of them can be listed as:

- Precious metals like gold, silver, bronze and copper
- Animals like cattle, camels and horses
- Precious stones of any kind
- Cowry shells, Cocoa beans
- Sugar canes, Salt, Tobacco
- Grains and durable fruits like dates

Let us now discuss a bit about the features of money and its functions in economic life.

FEATURES AND FUNCTIONS OF MONEY

Economic actors often want to see certain features in a commodity in order to think of using it as money. These features can be summarized as durability, divisibility, processability, homogeneity and marketability.[3]

1. Durability

Commodities that are to be used for monetary purposes should be durable. They must last for a relatively long period of time without losing their value. The longer life of a commodity means the higher chance of it to be used for monetary means in order to serve as a better storage of value.

2. Divisibility

Divisibility means the ability of a commodity to be divided without losing its value disproportionately. For example it is more difficult to use clothes as a medium of exchange than food since clothes are indivisible goods which won't allow you to change its value by dividing it. It is physically divisible but it will lose a disproportionate part of its value by being divided.

Animals are an exception of this feature. Although cattle are known to be indivisible goods, it is a fact that they are used as a medium of exchange in both nomadic societies and agricultural societies. The first reason of it is the possibility to gain great benefits (milk, wool, breeding, transportation, etc.) from them without a loss in their value. The costs of owning them are almost insignificant. Secondly, they are more suitable for transactions of higher value (buying land, home, etc.) in times where money has certain weight which makes it harder and unsafe to transport in big amounts. Animals on the other hand can transport themselves and even carry their owners in the meantime while being unsuitable for stealing as they slow the thief down.

3. Processability

It should be easy to determine the value of a medium of exchange, but it is difficult to carry weights and scales all the time, hence it would be better at least to get rid of this transaction cost. This can be accomplished if the money is processable enough to put a mark on it that symbolizes its market value. Precious metals are far more advantageous than other commodities in terms of this feature which played a major role on their popularity as the most preferred commodity for realizing monetary functions.

4. Homogeneity

Commodities that are to be used as money should be standard and fungible; meaning they must have the same value with others of the same specie and physical qualities. This feature is essential for money to be used as a common unit of account.

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[3] Hülsmann, Jörg G. (2008). "The Ethics of Money Production", Ludwig Von Mises Institute, p. 23.

5. Marketability

Commodities that are to be used as money should be marketable i.e. acceptable by most of the economic actors. This is essential with regards to natural monies since they have to have market value beforehand to be able to serve as a medium of exchange. It is only possible if they also have non-monetary uses. For example, walnuts have to have non-monetary uses (consumption) beforehand in order to have a market value which then makes it possible to serve for monetary purposes. So it will become money over time in addition to being one of the consumption goods.

We can summarize the functions of money in economic life in three titles.[4]

1. Facilitator of Transactions

Money facilitates economic transactions significantly and increases transaction volume. Both the quantity and the quality of goods and services produced in an economy increase by the increase of circulation velocity which results in higher quality and lower prices (higher purchasing power). Moreover, credit institutions that emerge along with money satisfy funding needs which is an essential necessity of developed economies.

2. Unit of Account

Money causes prices to emerge which allow the (market) values of different goods and services to be comparable to one another. This is especially necessary for starting an enterprise and creating areas of employment. Entrepreneurship is impossible in an economy where different goods and services cannot be accounted by a common unit. Hence money constitutes a common unit of account which allows entrepreneurship and increases employment as a result.

3. Storage of Value

As we have discussed in the relevant section, people have a necessity to store value for further transactions. It is called saving. It considerably decreases the cost of living by allowing economic actors the opportunity to compensate difficult times by good times. Money therefore decreases the cost of living substantially and creates self confidence in economic actors which also allow them to take risks and collaborate a lot easier.

The essential condition of economic growth is entrepreneurship which needs the ability to accumulate capital. It is only possible by using sound money for the storage of value. Entrepreneurship creates employment and increases the added-value per capita. People earn more by contributing to the production of more valuable goods than they would otherwise by producing less valuable goods themselves. Hence money economizes labor.

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[4] Rothbard (1963), p. 11.

TYPES OF MONEY

There are various adjectives used for classifying money in terms of its nature. Therefore it is more meaningful to make the classification from different aspects separately.

Money types in terms of its source:

1. Natural money
2. Official money

This aspect of money determines the underlying dynamics of its emergence. Natural money emerges primarily from social dynamics while official money emerges from political dynamics. We need to make one more classification from another aspect in order to handle the money from its economic features and consequences.

Money types in terms of its physical form:

1. Commodity money
2. Paper money
3. Electronic money

This can also be considered as money types in terms of its chronology where each one was first used as a substitute for the previous one but took its place over time.

TYPES OF MONEY IN TERMS OF ITS SOURCE

1. Natural Money

The spontaneously emerged monies are called natural money. Various examples of natural money were used in history as is remarked earlier such as precious metals, stones, animals, grains, cocoa beans, cowry shells, etc. Carl Menger states that the most widely used example of natural money in ancient communities is cattle.[5]

Even though it sounds old, the concept of natural money always survives. It is possible to talk about the monetary functions of cigarettes in prisons as a modern example.

Natural money is essentially a social phenomenon.[6] It can emerge in any society where there are more than several goods exist in the economy. The source of natural money is the market and its examples are often consumable commodities as well.[7]

2. Official Money (Forced Money & Legal Tender)

Official money takes its source from political power. The state is defined as the centralized political power that maintains the monopoly of the legitimate use of force within a certain territory.[8] When the state uses its political power to force economic actors to accept certain types of money in payments, that money becomes the official money. It is called forced money or legal tender in terminology. This coercion is often accompanied by the prohibition of other money types in order to monopolize the lucrative business of money production. So the official money takes its source from the one-sided political intervention rather than the market process which reflects the mutually effected free choices of people. It is therefore a political phenomenon.[9]

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[5] Menger, Carl (1871). "Principles of Economics", Ludwig Von Mises Institute (2007), p. 263.
[6] Menger, Carl (1892). "On the Origins of Money", Ludwig Von Mises Institute (2009), p. 51. Hülsmann (2008), s. 26.
[7] Hülsmann (2008), p. 24-27.
[8] Weber, Max (1919). "Politics as a Vocation", Hackett Publishing Company (2004), p. 34.
[9] Hülsmann (2008), p. 27.

TYPES OF MONEY IN TERMS OF ITS PHYSICAL FORM

1. Commodity Money

Commodity money emerges by making use of consumable goods with certain features in monetary purposes such as a medium of exchange and storage of value. The most widely used examples of commodity money in history are gold, silver, grain, salt and cattle. Natural monies are often commodity monies though there are modern examples of natural non-commodity monies. They may either have real values or nominal values or a mixture of both.

Gold and silver nuggets are commodity monies with real value. Bear in mind that real value means market value, not an inherent value that is subject to a sort of calculation. It derives its value simply by being preferred by people and to the extent that it is so.

Modern coins on the other hand are commodity monies with a fixed nominal value. People make use of them by their face value rather than by their weight in the case of real commodity money. The metals used in modern coins' alloy are not that worthy and preferable. So they have little to no real value at all. They are called token coins in terminology in order to differentiate them from coins with real value.

Gold/silver coins are commodity monies with a mixture of both real value and a nominal value. They are also used by their face value in order to facilitate transactions but their weight matters too since there is always the possibility to melt them and use the precious metal instead if people come to believe that its face value is lower than the metal's market value. It also gives the signal of an exploitative money producer if people come to believe that its face value is way too high than the metal's market value.

The vulnerability for debasement is the main risk of using commodity money with face value. The way to prevent this type of fraud to some extent is ensuring that the money is supplied in the dynamics of a free market by several producers competitively.

The advantage of commodity money is being scarce and hence its ability to restrain the producers from causing inflation. To give an example, we can argue that the earth's gold and silver reserves would never afford a world war considering its tremendous costs. Such an amount would never be accumulated by mining. So governments had to find another way to pay people which leads us to the next section.

2. Paper Money

Paper money can be used as a substitute for commodity money which can be redeemed by its producer within certain conditions. If the redeemability is removed for any reason, then it becomes a fiat money.

a. Paper Money as a Substitute: Banknote

Paper money or a banknote is a piece of paper issued by commercial banks that signifies a certain amount of base money equal to the banknote's face value deposited in the bank's vault and may be received on demand of the holder. The advantages of banknotes are the significantly low cost of its production regardless of its face value, its portability and easiness to use.[10] The main disadvantage is the opportunity it gives to the issuer to use the deposited money for its own ends and exploit people's property. This is called fractional reserve banking. In fractional reserve banking, holding a banknote does not guarantee that it may be redeemed anytime. It is merely a promissory note meaning that the issuer promises to redeem it on demand based on the assumption that it will only have to redeem a fraction of its banknotes but not all of them at the same time.

Money substitutes derive their value in representing a more valuable/acceptable kind of base money. But to the extent that people prefer money substitutes instead of specie, the base money will disappear from circulation and the issuers will have a stronger incentive to print banknotes and not think about having reserves for redemption.[11] This causes inflation and a decrease in the purchasing power of money. The way to prevent it is again allowing several banks to issue banknotes competitively and disallowing a central bank which monopolizes the issue of banknotes.

b. Irredeemable Paper (Fiat) Money

Fiat money is an irredeemable banknote. They cannot be redeemed for a more valuable commodity. They only have nominal value imposed by its issuer (often the government). All official currencies in today's world (dollar, euro, pound, etc.) are fiat money and legal tender. It is hard for a fiat money to be emerged naturally. Almost all types of fiat money were originally money substitutes (banknote). They were first declared as legal tender and then lost their redeemability by legislation.

The alleged advantage of fiat money is the lack of a limit on its production which allows governments to pursue monetary policies with reference to the public's demand for money especially in times of recession. The obvious disadvantage is its tendency to lose value (inflation) over time and make everyone using it poorer. The more fiat money produced, the more the issuer gains by inflating the money supply and decreasing its purchasing power. Even when it seems necessary to produce more paper money in order to ease the effects of recessions, it only serves to save the day at the expense of future prosperity.

The production of fiat money makes the same effect as taxing; hence it is often referred as an indirect tax.[12]

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[10] Hülsmann (2008), p. 29-30.

[11] Hayek (1933), p. 147, 151-152

[12] Brough, William (1896). "The Natural Law of Money", G.P. Putnam's Sons, p. 106.

3. Electronic (Deposit) Money

Electronic money is a gift of the technological progress to banking industry. It is the modern money substitute which people use instead of fiat paper money because of the further easiness it provides on economic transactions as well as on its transportation and storage. Electronic money is created when banks entitle customers to an amount of money in their bank account either by receiving it as a deposit or by lending to the customer. It is fully redeemable in the form of base money in full reserve banking which makes it a 100% money substitute. In fractional reserve banking where banks are not forced to hold all the deposited money in their vaults, it is still redeemable but with the assumption that not most of the customers would like to redeem their money at the same time. This makes it fiduciary money rather than a money substitute.

Bank money is by law regarded not as a bailment, but as a liability (IOU) of the bank. The bank becomes indebted to the customer when it receives a deposit. Customer gives a loan to the bank that is repayable on demand. Using deposited money in transactions therefore means the transfer of a claim and people prefer to do it on the fiduciary assumption that banks will always be prudent enough to hold some reserves in order to repay their debts on demand.

More than 90% of the world's money supply today is of this type and it is becoming more and more official (legal tender) by governmental measures that force people to open a bank account in order to receive payments like wage or rental.

Other Types of Money

Restaurant vouchers used between companies via employees can be considered a type of money though with limited marketability. It falls in the category of a natural fiduciary paper money. It is natural because it is introduced by the market. It is in paper form and it is not a substitute for base money, rather a fiduciary media of exchange.

Banks sometimes issue reward points or mile points to their credit card holders which may be used in certain sectors within certain periods of time. Famous brands do the same to their major customers under the name of gift cards or money points. These are all natural fiduciary monies in paper or virtual (electronic) form. They can be used as a medium of exchange within limited conditions but cannot be used for anything else than its own purpose and cannot be exchanged for base money.

Even though official types of money seem to be predominant in today's world, these examples show that markets continue to create money in some form or another which proves that money is a natural phenomenon. It tends to be pluralistic despite all efforts of governments to have it under control. Therefore, it is groundless and vain to keep it under control considering that the plurality of producers of any goods is per se a good thing in virtue of inviting competition to the market and boosting the quality of the mentioned product.

CONCLUSION

Money is a natural phenomenon that can emerge spontaneously in any society that hosts more than several goods and services ready for exchange. People historically used some marketable commodities like precious metals, animals, grain, salt and other durable goods for monetary purposes. Early depository institutions issued receipts for providing the service of safekeeping valuable commodities. It did not take long for people to start using these receipts (paper money) in economic transactions rather than commodities that have certain weights and relatively limited values which make them more costly to use. By the proliferation of paper money and some coercion of public authorities to make people use it instead of a valuable and scarce commodity, it became the official type of base money almost everywhere in the world.

Advancements in computer technology created a new opportunity for money producers to introduce electronic money which serves the same purpose that paper money served before: more easiness to use and lower transaction costs. The significantly low cost of using virtual memories stored in computers as money disfavored using physical money, so electronic money became the most common type of money in the second half of 20th century. It now constitutes more than 90% of the world's money supply.

It came as no surprise for those who know Gresham's Law which states: "bad money drives out good money". It means that if people are making use of more than one type of money, they tend to use the less marketable one (inside money) for domestic transactions and the more marketable one (outside money) for cross-border transactions and savings. Hence the domestic circulation of more marketable money will decrease and leave its place to the less marketable one over time. So people kept and used their electronic money substitutes even more and those substitutes (bits in computer memories) became what we know as money today. Sadly enough it brought a dangerous and even potentially catastrophic character in the global economy.

The ever decreasing cost of money production gave the money producers (commercial banks and governments via central banks) an irresistible incentive of generating income by inflating the money supply through credit and stealing from the purchasing power of people's money. There have been many studies on the possibility of a transition to sound money in recent years. Yet it is not possible to contribute on this intellectual struggle without comprehending the nature and types of money throughout history.

We hope that this humble study provides a brief introduction on the subject.

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