2. Money: types, monetary mechanisms, aggregates

A remarkable property of money

Karl Marx (1818 – 1883) drew the attention on a distinction he assigned to Aristotle (IVth century B.C.) when the Greek philosopher discusses the way prices are fixed. It is the distinction between “usage value” and “exchange value”. It happens however that the word “value” is lacking from the passage of the *Nichomachean Ethics* that Marx supposedly translated. The closest one finds to our current notion of “value” as meaning the *truth* lurking behind a price in the text of Aristotle is the phrase “as measured by price”.

We know by now that the word “value was deliberately entered in the translation by an early translator: the Scholastic thinker Albert Magnus (1193-1280). Sylvain Piron has shown that Albert Magnus wanted that *values* became the background against which prices would be discussed from then on (Piron, Sylvain, « Albert le Grand et le concept de valeur », *I Beni di questo mondo. Teorie etico-economiche nel laboratorio dell'Europa medievale*, R. Lambertini, L. Sileo (Ed.), 2010 : 131-156).

The phrases “usage value” and “exchange value” have by now acquired their own fame but what does one find instead in the mistranslated passage of Aristotle?

What the Greek philosopher actually says is that there are for all things having a price, two possible usages: being used for its proper usage, i.e. for shoes for instance of being worn at one’s feet, and being used for being exchanged, like for instance for shoes, being exchanged for a guitar lesson.

What is remarkable with money is that it is the only commodity that we are aware of where these two usages get conflated: the proper usage for money is of being exchanged. Being used for being exchanged is the proper usage for money.

The different types of money

In *A Treatise on Money* (1930), John Maynard Keynes offers an excellent catalogue of the different types of money.

1) *Commodity money*

Commodity money is money where what is used in exchange is in fact a commodity that can be traded as such. This is in the historical cases known to us, money made out of precious metals such as gold and silver.

Would the political system supporting the money system collapse (a kingdom through a revolution for instance), the holder of the money could still trade it for the weight of metal present in the coins.

Commodity money uses a generic means of exchange: commodity money is, one may say, a barter system where one of the commodities exchanged is in every instance a precious metal.

2) *Managed money*

In a managed money system, what circulates as money is made out of tokens deprived of any real worth as such, such as paper banknotes and coins made out of base metal. But managed money remains backed by precious metals. The opportunity is still open to anybody holding large amounts of the currency to turn to the central bank issuing that money and exchange it for the precious metal that it still represents.

This is the system which was at work typically between the two World Wars of the twentieth century, one nation after the other abandoning however the system to turn to the third instance of money: *fiat money.*

3) *Fiat money*

The word "fiat" refers to "trusting" in Latin. A *fiat money* rests on trust only in the good faith of the issuing State as the tokens that circulate have ceased to represent something else having a "true" worth such as precious metals.

In 1944 at Bretton Woods (New Hampshire, U.S.) nations decided that the American dollar only would remain a *managed money* while all others would simply be pegged to the dollar. An ounce of gold would be worth $35. The worth of all other currencies in gold would be established by determining their own parity to the dollar.

This international monetary order came to an end in 1971 when it was denounced by Richard Nixon then president of the United States. Several nations such as Germany, France and Switzerland had just exchanged large amounts of dollars for gold while the worth of gold in dollars had shot up because of the poor state of the United States account balance due to the cost of the war in Vietnam.

We've lived now for over 40 years without an international monetary order. Some claim that many of our economic issues are a consequence of this.

Commodity money, managed money and fiat money are all, according to Keynes, "money proper". "Money proper" he contrasts with "bank money".

"Bank money" is debt instruments, i.e. acknowledgements of debt that can be used as collateral for a loan. The economist Joseph Schumpeter (1883-1950) held the view that debt instruments should be regarded as "money proper". A reason why it shouldn't be is that the ultimate worth of a debt instrument is only known at redemption: only then becomes it known if the amount of money reimbursed is what was promised, less than what was promised or… zero.

As "managed" and "fiat" money are no commodity the quality of which can be tested, they require to be trusted, implying that counterfeiters are indicted, tried and punished. Which necessitates a sophisticated justice system with police, courts and jails.

<u>The various functions of money</u>

The functions of money were defined in the same terms as we do now from the time of Aristotle.

Aristotle distinguished 10 *categories* which are the various perspectives we can adopt when looking at things.

One of these categories is *quantity*. In respect with quantity, money provides an *accounting standard unit*. We can rank things as long as they're liable to be sold and purchased according to their price.

Another of Aristotle's categories is *quality*. In that respect, Aristotle distinguishes a quality as being *in actu*, in dynamic actuality: currently being displayed, from being *in potentia*: being present statically in the thing itself but only as a potentiality. As far as money is concerned it is *in actu* when it is actually *used as a means for exchange* and it is *in potentia* when it is *kept as a reserve* for being used in exchange at a later time: its function as a means for exchange has then been delayed.

Accounting standard unit, *means for exchange* and *reserve for delayed exchange* are the three functions for money traditionally mentioned but it can as well be envisioned according to other Aristotelian categories, for example as *substance*: precious metal, paper, base metal: nickel or copper, traces on a hard disk, etc. or as *location*: in my pocket, on my account at the bank, in the central bank, etc. or *when in time*: as "money proper" with a current face worth or as "bank money" as a forthcoming payment.

Money creation

Central banks are entrusted with the creation and withdrawal of currency so as to maintain a volume of it ensuring price stability.

Commercial banks do not create currency: the amounts they lend to customers have to be gathered by them through borrowing from the central bank as against their reserves, through borrowing from other banks, or from deposits or savings accounts of their customers.

In the eighteenth and nineteenth century, Henry Thornton (1760-1815) and Henry Dunning McLeod (1821-1901) uttered the view that commercial banks were creating money. This was not taken very seriously until Joseph Schumpeter (1883-1950) popularised the view. Although he was aware that it was not literally the case, Schumpeter claimed that it was more convenient to represent things that way. The British economist Edwin Cannan (1861-1935) who influenced Keynes in many respects said that claiming that commercial banks were *creating* money amounted to say that the attendant of a theatre's cloakroom who would lend out clothes left in his keep while the show is on, was actually "creating" them.

Money aggregates

Money aggregates are different ways of looking at circulating money, actually as ways of adding up to "money proper", different types of "bank money", such as amounts on savings deposits, Certificates of Deposits, other debt instruments.

The variation in volume of different money aggregates is due to the fact that the same debt instrument can be lent out repeatedly, being exchanged in each instance for a certain amount of

money (I've suggested calling the "dimensionality" of money the capacity for a debt instrument to be used repeatedly as collateral for loans).

Money aggregates are liable to collapse suddenly in crisis times when debt instruments fail to be refunded and redemption occurs at a level well below face worth (the sum that had effectively been lent). One talks then of default and of restructuring for the precise amount that ends up being reimbursed (say, "34 cents to the dollar").

"Alternative" or "complementary" currencies

Some people are of the opinion that various economic or financial issues are likely to be solved by altering the nature of money.

Such was for instance Silvio Gesell (1862-1930) a German-Belgian businessman who propounded a "rusting" currency the worth of which would drop with the elapsing of time (a stamp needed to be bought every week to allow banknotes to keep on circulating – reducing its worth by the price of the stamp). This drop in worth of a "rusting" currency would encourage its holder to use it as a means of exchange and refrain from hoarding it, i.e. using it as a reserve for delayed exchange.

Keynes remarked that if such money would become current people would bypass it by turning instead to precious metals the worth of which remains constant.

Promoters of complementary currencies usually entertain of them a "commodity money" view, stressing that they need to be backed by "something solid" in the likeness of the precious metals of old, such as a basket of commodities representing a nation's GDP, bio-diverse seed, oil or energy, etc.

When complementary currencies are envisaged as "fiat money", the issue is raised of who will play the role of its guarantor, should it not be the state.

Bitcoin is a currency aiming at becoming international and rivalling existing State-backed currencies. Its promoters claim there is no need for a guarantor in its case as its electronic operation is foolproof; hacking has however undermined such pretence (the Mount Gox Bitcoin exchange's demise in Tokyo in February 2014). Its speculative nature and its use by gangsters for money-laundering purposes have made states distrustful of Bitcoin.

The inventors of Bitcoin have mimicked for its creation the operation of a "commodity" money backed by precious metal, calling the process "mining".