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Do monetary systems rediscover precious metals in the era of 'bitcoins'?

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Current monetary systems are based on a fiduciary currency. In fact, the international exchange of goods and their valuation is currently in US dollars, despite the unlikely decline of that currency in the times to come. Actually, the question is often asked whether it is possible (when and how) that another system of payment instruments shall replaces the dollar.

Since its historical memory, "La Moneta" has met two needs: value reserve and transport values in time and space. Like a trunk, like a railroad car, like a cart carries, the coins bring the value from one place to another. In a patriarchal economy of floats and trunks, few carriages were needed. Gold, as well as its favourite lieutenants, silver and copper, also indestructible, transferred values in time and space sufficiently. Gold, like other metals, therefore had an intrinsic value, free from the dangers of a regulated and representative currency, from one day to the next, it could have reduced its purchasing power and could have inflated itself; or be treasured, provoking deflation. As described by Mr. Gresham, the coin that always confirms its value, drives away the one that is not able to do it. Gold, as well as silver and copper, took the place of the 'pecunia' (from sheep, livestock) and of the 'salis' (salt, salary), thanks to their uniformity of value in time and space.

Consequently, inflation also occurred in metallic money systems too. The Roman emperors, from Nero up to the 3rd century, they had entrusted themselves to the Augustan system, articulated on four minted metals: gold, silver, orichalcum (copper and zinc alloy, like our brass) and copper. The deception consisted in the reduction of the precious metal contained in the coins: in those of gold and silver it passed from 99% in the Augustan age, to 50% of the times of Caracalla. The situation became unsustainable during the chrisis of the third century and the economic system always collapsed in the time of Diocletian. The military demanded continuous increases in salary, the imperial bureaucracy absorbed most of the resources, and taxation was becoming too high in the countryside.

In 301 A.D., the Emperor issued an Edict which established the prices of the principal goods. For that reason everything stopped, nobody sold goods in exchange for money. The monetary circulation disappeared and it was unnecessary to mint more coins. Thus, one wagon that made one trip a day, was equivalent to seven wagons with one trip per week. The Edict was, as it was to be expected, a complete failure. Shortly, after Costantine he tried again and, unlike Diocletian, did not pretend to stabilize the prices of products by decree. Costantine fixed the parity of the circulating currency with fine gold, instead: in 310 A.D., he introduced a new gold coin, the "*solidus aureus*", beaten to 1/72 of lbs (= 4.54 g) unchanged. The 'solidus' (that comes with the modern Italian term "soldo", that means 'money') guaranteed, the weight and the title in gold for decades, restoring trust to long-distance value relationships between the various part of the vast empire and over time. The fall of the empire would not have happened for monetary reasons thanks to the safety of gold and coins.[1]

Roman monetary affairs of the 3rd century certainly happened also in previous civilizations, and they would be repeated again in the following centuries.

Instead, what happened at the dawn of modernity, at the beginning of the eighteenth century changed the history of money systems and the lives of men. Since the earliest times of which we have witnessed until the Industrial Revolution, especially in England in the eighteenth century, the lifestyle, habits, rhythms and '*traditio*' (cultural heritage) had not undergone sudden changes in any of the great human civilizations on earth. During the centuries, without traumas, economics and exchanges, cultures and ways of thinking, had seen grandparents, fathers and sons "live in the same meanings" with techniques and productions that did not register sudden changes. The massive inflation under Emperor Diocletian[2], but also wars, invasions, famines and the black plague of 1247 in Europe had never been able to settle deep gaps among generations. Until the first half of 1700 the world changed without rapid jumps and heavy falls.

The industrial and monetary revolution, first of all, in England in the eighteenth century, on the contrary, speeded up the changes in the economy and lifestyles in a short time. Originating from three factors, namely technical improvements, capital accumulation and the introduction of paper money, the changes that have occurred in the last three centuries are only comparable, probably, to what happened at the end of the last ice age, before the beginning of the ancient history. Steam trains, assembly line, Taylorism in industrial production, coal, electricity, petroleum, chemistry, plastics, steel, industrial automation, optical fibers, nuclear applications, nanotechnology, spacecraft, and so on, represent the evolution, amazing and fast, of the production techniques of modern time.

In modernity, it could be glimpsed a second factor, the accumulation of capital, whose beginning we can date at the beginning of the seventeenth century, thanks to the return of Sir Francis Drake's flagship Golden Hind. In "the year of grace" 1580, Golden Hind landed in the Thames estuary with the cargo of gold stolen by Drake from the Spaniards by boarding the Galleon Nuestra Señora de la Concepción. The expedition had been financed by Queen Elizabeth of England herself, who personally climbed on the newly moored Golden Hint to meet and greet Sir Francis. The loot, equal to 6 tons of gold, was used to pay the entire substantial foreign debt of the British. There were still £ 40,000[3] left over, invested in the Levant Company in the A.D. 1600, then Company of the East Indies, and imperial British army until 1874. The 'English centuries' began from that moment, time and space of the British global hegemony in history. An essentially maritime domain, based on military projection, with a first-rate and technological background and, as a third factor, due to modern monetary changes, thanks to the monetary projection based on the pound with a golden background. The introduction of paper money by the British Empire in 1694 represents, in fact, an epochal turning point for the history of economics and an instrument of incomparable domination.

Therefore, it was Industrial and Technical Revolution, accumulation of capital and, finally, paper money. Until 1694, in England and elsewhere, the only officially circulating currency was the coined coins. And, as in ancient times or those of Augustus and Constantine, metal coins have always had an ingrained value. Since 1694 a bill was issued, the pound sterling, subsequently produced in series from the early 1700s as gold-based paper money: it corresponded to a fixed exchange with gold deposited at the Bank of England. For that reason, it was called "Gold Standard", but gold did not circulate "physically" any more: in the hands of men from that time the paper was circulating and no longer metal. The paper can be printed without limits, while any metal must be extracted from the mines. The English 'golden system' will remain the foundation of the British Empire until 1914. The issuing banks after 1694 became almost all private (they are still today) and the public coinage and metal will remain

[1] In fact, the fall of imperial Rome in the West occurred in the fifth century for military reasons and political feuds within the Roman Senate, while Constantinople with the new monetary system (the Greek Byzantium) remained standing up for centuries.

[2] It drove silver completely out of circulation.

[3] It is estimated that every pound brought home by Drake has been transformed, in almost three centuries, into 100 thousand pounds thanks to the compound interest of 3.25%.

residual. No one would have been able to verify the carats of gold coinage any more, or the weight of gold kept in deposits. The printing of banknotes allowed to increase of the resources of the state budgets based on the confidence that the banknote received. Alexander the Great in Persepolis and the Inca treasure of Pizzarro had recorded the dispersion of immense quantities of gold and precious. Now the gold that the Rand miners had brought to light was concentrated and buried again in the Central Bank's warehouses.

But the loss of value of "paper money" can sometimes be faster than the "metallic one". The Vladimir Ilič Lenin's (1870-1924) hope, after the end of the British 'Gold standard' in 1914, was that inflation would cause the collapse of capitalims: "governments confiscate with secret hands, promote the 'rentiers', they depress trade". This is the premise for the "revolution in the capitalist countries". Indeed, the post-war economic crisis will have more complex connotations linked primarily to deflation more than inflation. Deflation is not only a problem of the twentieth century. Certainly, the deflation was the origin of the crisis of 1929, illustrated by J. Maynard Keynes (1883-1946). Lord Keynes proved how excess production capacity compared to aggregate demand was the primary cause of deflationary phenomena, provoke even more damage than the German inflation of the Weimar Republic. The British attempt to restore the Gold standard, which lasted until 1931, will produce heavier effects than any loss of purchasing power of the currency. The same Gold has been, during the history of civilizations, a sovereign whose defects have remained hidden by utility. As difficult to reproduce, sometimes monopoly of caves, disputed, the gold and the silver can't in fact transport all the wealth produced by man in times and spaces. The claim of the British Empire, also at its own epilogue in 1930, to repropose the pound at the gold base at the centre of international trade. As Keynes writes, what matters is not the exchange rate between gold and pound that does not involve an increase in production, but the impulse of consumption and aggregate demand: if the products remain unsold and the warehouses are full of stocks, it is useless produce again, while the money saved will not be invested in new plants and machinery. To increase the circulation of money, with the pound tied to a fixed parity with gold, it would have been necessary to discover new mines. It does not happen with the fast pace and lilts of modern technological progress.

Since 1946 the Dollar Standard replaced the pound as international reference currency. Carriages, wagons and trunks were now called Dollars in the new system. Reserve money and world transactions, like the pound sterling until then, flanked the gold with a fixed parity of $ 35 per ounce of gold. The proposal of the 'Bancor' proposed by Keynes in 1943 as part of a project, not implemented, of union for international compensation (International Clearing Union) was discarded in the new American imperial vision. The "*Novus ordo saeculorum*", motto taken from Virgil's Eclogue IV, even printed in US Notes, has a clear meaning. Other quotes from Virgil, the American "Founding Fathers" had, moreover, reported in the 'Great Seal' Usa, such as that readable on the back of the same dollar bill: "*Quid non, mortalia pectora cogis, / **Auri sacra fames***"[4]. Keynesian commodity money was therefore discarged. In July 1944 at Bretton Woods, New Hampshire location where the Dollar Standard was approved, US currency was chosen like international currency paper. This exchange system was established by a state under a monopoly regime.

It lasted less than the English currency in the gold exchange and it was abandoned in 1971. Without any link with gold, after 1971, the Dollar is still today the most internationally recognized payment instrument, despite the fact that at the end of the 1999 the so-called derivatives circulating in the world amounted to 30,000 billion dollars, equal to 285% of world GDP; and, only ten years later, at the end of 2009, they had reached the rating of 690,000 billion dollars, that is 1057% of world GDP.

The path of history, of scientific discoveries, of technologies, up to the eighteenth century, initially very slow and then, faster and faster, accompanied by the invention of banknotes, fiduciary money and credit, has determined in the monetary systems the replacement first physically and, subsequently, also of purely theoretical reference of precious metals and of gold in particular. Finally, to the present day, we have passed from Paper banknotes to credit plastic card, to reach Crypto currencies, a pure technological sign far away from concrete goods and services provided. Just the 'digital currency'.

An operation in crypto currency has its own specific ID code, its name and surname and its history. If Romeo buys a meal with coin A (e.g./ ID: 834567), the transaction puts in the archive the passage of currency 'A' from Romeo's wallet to Juliet's in exchange for an asset. The link between a Bitcoin platform and the Cripto currencies, established in 2009, manages transactions and exchanges of information and data in the finance and payment areas. The proof of the passage of the new property is created thanks to a digital signature

[4] On the American Banknote there is also another quote: 'Annuit coepitis' (**God is in favor of the enterprise**) taken from the Trojan prayer to Jupiter «Audacibus annue coepitis» (**Almighty Jupiter, consents to the audacious undertakings**, aeneid, IX, 625)

of the transaction. In order to use Bitcoin currency as an exchange currency, simply install an application on your computer or mobile phone. The currency of Ethereum, for example, takes its name from a "virtual currency" called "Ether" which itself represents the possibility of producing the shops in cryptocurrency "Ether" by it we can "pay" for the realization of contracts. Ether is basically and concretely a 'token' with an attached digital signature, whose trust is at the base of the Ether or Bitcoin system. Messages are encrypted and access keys are available only to those who are part of the network. The control system, called Blockchain, allows all participants to confirm or not a transaction. Bitcoins are virtual but produce the same effects of traditional banknotes. Therefore they do not represent anything in the physical world, but they have value for the mere fact that people agree to exchange them with goods or services, in order to have an ever greater number on their account, convinced that other people do the same.

The new global computer technologies, based by search engines, artificial intelligences in the service of finance, have magnified the global speculations. The "quick earnings" ('*subiti guadagni'*) are also mentioned by Dante Alighieri (1265-1321) with reference to the Black Guelphs in the 13th century Florence. A finance whose wealth expands without control and without limits by the individual nations and the central banks themselves; without the limits that the golden base had, even with its defects, and which had guaranteed the ancient empires. The triumph of the representative credit currency is today at its peak in the world of transnational finance and the introduction of the bitcoins. Modern finance and its many products, hedge funds, the protagonists of speculation, have passed the stage of printing banknotes without a gold standard as in 1694. The new phase registers the use and the loan of money that do not even exist. It has not been printed by any Central Bank. This is the moment of virtual money. Will it last? Will be there any surprises?

In 1930 Irving Fisher (1867-1947), in his work "Monetary illusion", proposed one currency based on a basket of goods. A real currency in which gold could combine real products to guarantee the circulation of money. The Keynesian idea of 'Bancor' could also have foreseen a basket of coins similarly to what was represented today by the IMF's[5] special drawing rights, whose values were based on a basket of national currencies. Will we go, with a delay of over 70 years, in this direction? Will Gold and Silver remain the prerogative of the production of prestigious jewels of the great Goldsmiths in Arezzo and elsewhere, or will they remain deposited in the vaults of the Central Banks? A wagon in a dead track, a trunk in the attic or in a vault are no longer currency, but a store of value.

Gold is to be returned to Goldsmiths only? Or will the monetary systems rediscover the Gold and other precious metals to ensure a circulation without 'volatility', not subject to speculation and ' quick earnings'?

[5] International Monetary Funds.