Can we dare make predictions about money?

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Abstract:
Money is a technique and techniques develop, recasting society in the process. As a result, we need to look at the technical nature of money and its long history, in tandem with societal upheaval. Assuming that money is based on trust, and that this trust develops, this paper attempts, by using examples from this long history, to present factual material that provides an understanding of the workings of the money-society relationship, irrespective of official doctrine. There is no doubt that the current trend towards paperless procedures is radically altering this relationship but it is far from certain that this shift is under control. Perhaps we should even be wary of a meltdown on the same scale as that seen in 14th century Europe. Can the increasing numbers of complementary currencies, representing a form of "uberisation" of money, pick up the baton?

Let us go back[1] to 1932. The Austrian town of Wörgl is suffering from the full force of the 1929 stock market crash. 1,500 of its 4,300 inhabitants are out of work. Most of the region's factories have closed down. Tax payments are seriously in arrears and the municipality is unable to carry out the most urgent repair work. The mayor decides to set up an emergency office with an eye to giving work to the unemployed. But how are they to be paid? There is no more tax revenue and the municipality's coffers are empty. He decides to draw on the experiment rolled out in Schwanenkirchen, a small, remote and poor Bavarian town where the main employer, a mine, was defunct. The town had pioneered and promoted use of "free money" called the "wära", which after initial reticence had been accepted by traders. The currency was also unusual in the fact that its value fell over time thus removing the temptation to hoard it.

The mayor of Wörgl decides to follow suit and the municipality prints currency in the form of a voucher representing money for work. This scrip is used to pay half the wages of council staff and the mayor himself. Initially, the town's businesspeople are sceptical. But once they see that council workers favour shops that accept the scrip and note its ever increasing circulation, they end up adopting it. The results speak for themselves as a new bridge and seven new roads are built, the forest is replanted and there is once again work for everyone!

(1) This information comes from the book by Derudder Ph. (2014), "*Les Monnaies locales complémentaires, pourquoi, comment*", Yves Michel.

In light of this success, several dozen Austrian municipalities suffering from the crisis consider similar measures. However, the Austrian Central Bank institutes legal proceedings against Wörgl council. In spite of backing from the famous economist Irving Fischer, the Austrian Supreme Court holds that the scheme is illegal and issues an order to stop it. Unemployment rises again, and shortly afterwards, Austrian citizens, who have run out of ideas to beat the crisis, accept Hitler's Anschluss which had already received considerable public support.

This story, and many others like it (there are thought to be around 5,000 complementary currencies worldwide[2]), leads to the philosophical question: what is money? What is its substance? Since the time of Aristotle, economy lessons have been teaching us that money has three uses: a store of value, a unit of account and a medium of exchange. But if we take the example of Wörgl's "work vouchers", such an interpretation no longer holds up.

First and foremost, money represents trust, and trust is a deep-seated anthropological characteristic which develops along with civilisations.

To back up this argument, I will refer to a number of historical eras. In her book, "*Les Trois Écritures*", Clarisse Herrenschmidt[3], drawing on the work of Jean Bottéro, reminds us that the beginnings of writing, on Mesopotamian tablets, were a form of notarised instrument, for instance, property titles and accounting documents. Writing was to "take due note" and to be able to find information in the event of a dispute. This first writings were therefore records intended to bolster trust.

Clarisse Herrenschmidt pursues her research and highlights a second form of writing. Following the domestication of camels and horses in around 3000 BC, trade began to expand along the entire future Silk Route between the Mediterranean and China. It became customary to pay for purchases using small gold and silver alloy ingots called electrums. But the respective content of the two metals was variable so traders and their customers wanted a more reliable system. Circa 620 BC, the King of Lydia[4] hit upon the idea of legitimising the value of coins by "minting" them. This involved engraving a symbol in the metal and represented the second form of writing.

The first minting took place in the sanctuary of Artemis in Ephesus. The symbols initially depicted lions and bulls. Subsequently, the Achaemenid Kings would have coins minted with their effigy. This represented the emergence of what we now know as money. Once again, it is a question of trust as the indelible recording of a value on a medium is designed to ensure that the information is reliable. Having a monarch's effigy on a coin was also intended to dissuade those who were considering forging it. This connection with authority still exists today as, although the central banks are private institutions, law enforcement and judicial authorities are tasked with prosecuting money forgers.

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(2) According to an assessment by Bernard Lietaer. See also his book, "*Au cœur de la monnaie (une approche anthropologique de la réalité monétaire)*" and the report from Club of Rome, "Money and sustainability, the missing link".
(3) Herrenschmidt C. (2007), "*Les Trois Écritures, langue, nombre, code*", Gallimard.
((4) At the time, Lydia was a wealthy country located on the borders of modern-day Greece and Turkey. Its king was called Gyges and he was the father of Alyattes and the grandfather of Croesus. The Pactolus river, which contained gold dust, flowed into Lydia.

We are so used to the link between major currencies and authority that we have forgotten about small currencies, such as the scrip in Wörgl, which are used to record exchanges between people who know each other and who therefore do not need an official go-between to instil mutual trust. In Africa, cowries (seashells) were used for this purpose for many years. In the Middle Ages in Europe, small black silver coins called *méreaux* were used as currency in rural markets. There are now around 5,000 complementary currencies worldwide.

But let us remain in the past for a moment. In the 13th century, a large number of money minting workshops, which were often managed by the clergy, provided the regions with a certain amount of independence. However metal became scarce as market activity rose, European silver mines became depleted and there was not enough money in circulation to fund trade.

Saint Louis unsuccessfully tried to start a gold coinage. His grandson, Philip IV (the Fair), who was struggling to fund his military campaigns, ultimately managed to introduce a monetary union[5]. This initiative was implemented at a time when European demographics were near saturation point[6]. The results were disastrous as rural markets were placed in a stranglehold. After Philip IV had seized the Templar treasury, there was a famine in 1316. Trust broke down and two dark centuries followed with near-constant famine, the plague and the Hundred Years' War.

European economies were able to recover during the Renaissance due to adequate flows of liquid assets from the plundering of South American gold and silver. Trust was restored and notes were even accepted (the forerunners of paper money) as instruments of trade (but only those signed by well-reputed Lombard or Batavia bankers). Although the use of banknotes is now widespread, instilling trust in these pieces of paper was no mean feat as witnessed by the collapse of the *assignats* (monetary instruments used during the time of the French Revolution and the French Revolutionary Wars) and the failure of the Law system in the 18th century[7].

During this Age of Enlightenment, specifically as from 1740, a prestigious woman, Maria Theresa of Austria became Holy Roman Empress (consort). Starting in 1741, silver bullion coins called Thalers[8] were minted with her effigy. When she died in 1780, there were a stock of surplus Thalers. These coins were especially well-minted and remained in circulation.

However, Austria was reluctant to use these coins as its tender as they represented a ruler from the past whereas the money in circulation should bear the effigy of the ruling monarch. These coins were disseminated in Africa, in particular in Abyssinia. The word "*thaler*" came to epitomise high-quality money. For the sake of harmony, it soon came to be called the "*dollar*". This is yet another example confirming the underlying nature of money, which is to instil trust. Trust is a human instinct and must be seen as such to establish a true understanding of what money really is.

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(5) See "*Monnaie, fiscalité et finances au temps de Philippe le Bel*", French Economic and Financial History Committee.

(6) Around 40 inhabitants per km^2, under the technical system in the early 14th century. Historian Pierre Chaunu wrote that "the world seemed to be full up".

(7) Concerning paper money in China, see Graeber D. (2013), "*Debt, the First 5 000 Years*", Melville House.

(8) The word "*thaler*" was in use as early as the 13th century.

In the 17th and 18th centuries, there was a shift in the way in which trust worked with the creation of central banks, especially the Bank of England, followed by the Banque de France, under Napoleon.

The Bank of England was set up in the wake of the Glorious or Bloodless Revolution of 1688-1689 which shook up the country. The subsequent relative religious stability drew a large number of protestants from continental Europe[9] to England. Growth was high and innovation at a zenith, and this momentum generated capital requirements. But the financial system was nothing like its modern-day counterpart and usurious rates were crippling economic activity. To get round this abuse and to allow for mass borrowing from the general public by the country, a bank was created at the initiative of William Paterson (1658-1719), and would become one of the mainstays of the British financial revolution. The Bank of England officially came into being on 27 July 1694.

The Bank of England's responsibilities and authority have constantly evolved[10]. In 1844, it was given exclusive bank note-issuing powers. As international trade was expanding, demand for banknotes was high. At that time, the United Kingdom was at the height of its powers. A century later, following the Second World War, the required reconstruction work was of a similar scale to other European countries. With an eye to effective reconstruction, the Bank of England was nationalised on 1 March 1946. It only became fully independent again in 1997.

Central banks are often seen as being government bodies. In reality, they are private institutions that attempt to mitigate the risk of banks defaulting by a form of pooling overseen by the financial community. For France's part[11], the historian Henri Guillemin explains that "So as not to deprive banks of any source of profit, the First Consul (Bonaparte) went as far as to allow the so-called "Banque de France" to share one of the government's main prerogatives, namely currency production. And, what is more, the metallic coins minted by the government cost it at least the price of the [required] gold and silver, whilst the unprecedented privilege granted to Pergot, Mallet et Cie meant that this bank, which is a partnership of private interests, would be able to produce money which cost it nothing…".

(9) Following, for instance, the revocation of the Edict of Nantes.
(10) The United Kingdom is a country beset with contradictions. There is not one, or two but three denominations of sterling. Whilst in France, all the banknotes in circulation are issued by the Banque de France, in the United Kingdom, the Bank of England only issues English banknotes. These are legal tender in both England and Wales. Other banks issue Scotland's and Northern Ireland's banknotes. For instance, in Scotland, Scottish banknotes are issued by three financial institutions, the Bank of Scotland, Clydesdale Bank and The Royal Bank of Scotland. In theory, these notes are only legal tender in Scotland but they are accepted throughout the United Kingdom. This would be like each region in France issuing its own money (excerpt from the Wikipedia article).
(11) The Banque de France was created on 18 January 1800.

The arrogance of major bankers peaked in the early 19th century. Nathan Rothschild, who doubled his fortune in a single day with a spectacular stock market coup during the Battle of Waterloo[12], said that "I care not what puppet is placed upon the throne of England to rule the Empire on which the sun never sets[13]. The man who controls Britain's money supply controls the British Empire, and I control the British money supply".

These words are not actually the mere expression of a degree of arrogance, they carried much more weight than at first sight. They heralded a change in civilisation. Until the end of the 18th century, power was won on the battlefield. It was a "sovereign" power, an executive, possibly reined in, according to Montesquieu's theory, by the legislature and the judiciary – a separation of powers which is officially still in force today. Nathan Rothschild's words in fact hailed a transition that was to drive the English-speaking world during the 19th and 20th centuries: power no longer lay with military force as this was serving something else, namely opening up trade steered by handling currencies.

The 19th century was marked by colonisation which was obviously funded by issuing European currencies. Trust in these currencies was based on a balance of power. The Opium Wars, by which England compelled China to open its ports to trade, provide an example of how this balance was able to serve commerce.

That is not the end of the story. It was during the 20th century that global monetarisation really took off. The facts can be summarised as follows:

- In 1907, there was a panic in the US when the stock market plummeted and there was a run on the banks. J. P. Morgan, who was then the richest man in the country, used half his fortune to keep the stock market going. Business did recover but the finance industry remained worried.

- For this reason, in 1910, on Jekyll Island off the coast of Georgia, a secret meeting was held, with the dozen or so participants only revealing their first names. They met to consider how to avoid such panics reoccurring.

The solution found was the creation of a lender of last resort so that banks would never be unable to repay their depositors. Paul Warburg, a young banker of German origin, wrote what became the first draft of the Federal Reserve Act, which was then sponsored by Senator Aldrich until it was put to vote in the Senate. This provided the blueprint for the Federal Reserve which was created in 1913 with bankers retaining tight control over its operations.

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(12) The Rothschild brothers funded Wellington's army through their international network. On the day of the battle, Nathan pretended to sell his British securities. As it was well-known that he had the fastest information sources, this action gave credence to the notion that Napoleon had won and led to a collapse of share prices in London. In concrete terms, Nathan had his assets bought back for low prices by his accomplices.

(13) The British Empire extended across all continents.

It is worth quoting Warburg's rationale: "The Monetary Commission's plan proceeded on the theory of the Bank of England, which leaves the management entirely in the hands of business men without giving the government any part in the management or control. The strong argument in favour of this theory is that central banking, like any other banking, is based on 'sound credit,' that the judging of credits is a matter of business which should be left in the hands of business men, and that the government should be kept out of business…

The Owen-Glass Bill proceeds, in this respect, more on the lines of the Banque de France and the German Reichsbank, the presidents and boards of which are to a certain extent appointed by the government. These central banks, while legally private corporations, are semi-governmental organs inasmuch as they are permitted to issue the notes of the nation—particularly where there are elastic note issues, as in almost all countries except England—and inasmuch as they are the custodians of practically the entire metallic reserves of the country and the keepers of the government funds. Moreover in questions of national policy the government must rely on the willing and loyal co-operation of these central organs".

The final sentence clearly demonstrates the reversal of the balance of power whilst recommending that it remained unofficial. For the sake of appearances, the government would stay in place but the financial community now considered that only it was able to manage the world.

But was it really able to do so? The Great Depression, which started in 1929[14], was to establish otherwise.

This was the most decisive economic event of the 20th century. It began with the Wall Street Crash in 1929, which was followed, in 1931, by the collapse of Credit-Anstalt[15], in Vienna, which caused a domino effect for bank failures. Managers did not know how to act and economists came up with two opposing theories: a return to orthodoxy, by requiring discipline from banks and, at the other end of the spectrum, cash injections through government investment to kick-start the economy. The second theory, which is that of the economist John Maynard Keynes, spurred President Roosevelt's New Deal programs (the Tennessee Valley Authority's dams). In Germany, Hitler's arrival in power and the subsequent warmongering are repercussions of the disruption caused by this crisis, which was also met by massive government investment.

It is now generally accepted that the scale of military expenditure on the Second World War enabled economies to recover from the Great Depression. Whilst official doctrine has remained, at least theoretically, pro-market, there was actually an unprecedented marshalling of the means of production by government procurement (essentially military), leading to the formation of a new force, the military-industrial complex, whose role expanded and diversified after the war ended.

(14) Followed by the 2008 crisis and the 29 instances of hyperinflation in the 20th century.

(15) Schubert A. (1991), "The Credit-Anstalt Crisis of 1931", Cambridge University Press.

But monetary issues were still subject to very close scrutiny. Less than a month after the Normandy Landings (1944), as the war was still raging, the United States invited representatives of 40 countries to Bretton Woods to discuss the monetary system; groundwork for the meeting had been laid two years earlier. So, in the midst of war, as the German army was about to be defeated in Russia, the United States had decided to change the monetary system.

There were two opposing factions during the discussions. On one hand, Keynes who, since the success of his recovery through investment theory, had acquired solid credibility and, on the other, Harry Dexter White, the US representative. Keynes advocated the introduction of a supranational currency called the "bancor". White imposed his gold exchange standard solution by using straightforward rationale: instead of complicating matters by creating a new currency, why not accept that any currency able to be converted into gold can be used to pay for international trade transactions. This seemingly simple solution in fact underhandedly promoted the dollar[16] as the global monetary standard, as subsequent events would make clear…

Before the war, as a precautionary measure, European countries had shipped the majority of their gold reserves across the Atlantic. The US government took advantage of the opportunity to recast the monetary system in its favour.

Two decades later, on 4 February 1965, during a landmark press conference[17], General De Gaulle stated that "What the United States owes to foreign countries it pays – at least in part – with dollars that it can simply issue if it chooses to". He added that it was therefore exempt from any regulation which could but lead them to harmful excesses. The English-speaking media cried scandal at the press conference. De Gaulle was speaking a truth which, according to them, should remain shrouded in secrecy.

Once De Gaulle had left office, his Prime Minister, Georges Pompidou, became the French President. As a former Director-General of Banque Rothschild, he was perfectly placed to handle monetary issues. Continuing his predecessor's approach, he asked the US, at a time when the dollar was under pressure owing to expenditure on the Vietnam war and President Johnson's programmes, to return a volume of gold worth $4 billion at the official rate set at Bretton Woods, namely $35 per ounce of gold. President Nixon, after discussions with his advisers, made a televised declaration on 15 August 1971[18]. Using the pretext of ongoing speculation, he announced that "the dollar would no longer be convertible to gold". This was essentially a ruse that thrust the dollar to the rank of global monetary standard, instead of gold.

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(16) Taking a close look at a one dollar bill, there are the words "*In God We Trust*" (the religious call for trust) and the Masonic Pyramid…

(17) Inspired by Jacques Rueff, a rigorous economist, who advised him during the introduction of the new franc. http://fresques.ina.fr/de-gaulle/fiche-media/Gaulle00105/conference-de-presse-du-4-fevrier-1965.html

(18) 15 August is when bad news is traditionally announced as the Europeans are on holiday.

Now, in 2017, an ounce of gold is worth $1,350, i.e. 38 times its official price at Bretton Woods. As a result, and as predicted by De Gaulle, the United States, and more specifically the financial community, have anchored the dollar as the standard and have issued it in abundance. Had they wished to mitigate the impact, they probably would not have been able to due to Gresham's Law ("bad money drives out good"). But they had no intention of doing so, as the following two examples show:

- First, the oil price is expressed in dollars worldwide. Two Heads of State attempted to change this: in Iraq, Saddam Hussein suggested that oil could be paid for in euros and, in Libya, Colonel Gaddafi mooted payment in SDRs[19]. I cannot help thinking[20] that the execution of these two leaders in especially sensational and humiliating style is likely to dissuade other oil producing countries from doing likewise.

- Second, there is the scale of the American war effort. How is it that a country, whose borders are not under any threat, spends half the global military budget, has an operational presence in all the world's oceans, worldwide satellite observation capabilities and drone launch logistics making it able to reach anywhere in the planet within mere minutes?

The answer can probably be found by drawing a parallel with the 19th century Opium Wars when England forced China to open its ports to international trade, including that of opium. In other words, the true driver is not – as it was in the past – to physically occupy a country, but to open up a new commercial and financial territory.

However, we should never forget that, first and foremost, money equates with trust. Since the 2008 subprime crisis, this trust has been undermined as the US began to issue trillions of dollars[21] to bail out their financial system. It is highly likely that a further failure on the scale of that of Lehman Brothers would, by means of a domino effect, cause an even larger crash that that of 1929. As a result, the trust attached to the dollar standard is wavering.

In the long run, this massive money issuance uniquely intended to save financial institutions could trigger global hyperinflation in dollars – a large-scale crisis that our civilisation would have difficulty recovering from. We should not forget that Adolf Hitler's accession to power was, in particular, a consequence, albeit far-removed, of the hyperinflation that hit Germany in 1924…

What other scenario can be envisaged? First, let me quote from a recent criticism of the current situation that appeared in the fortnightly magazine *The New American*. It shows that trust is waning, even in the United States:

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(19) The Special Drawing Rights of the International Monetary Fund, a body that was set up at Bretton Woods.

(20) After reading Perkins J. (2005), "*Confessions d'un assassin financier – Révélations sur la manipulation des économies du monde par les États-Unis*", Éditions Alterre. (English title: "Confessions of an Economic Hit Man").

(21) Sold to the general public under the sober term quantitative easing. Europeans (the ECB) fell into the same trap and did the same thing.

"After Texas which has just set up its own gold depositary, Kansas is now dealing another blow to the Federal Reserve's stranglehold over the flow of money and credit: its lawmakers are considering a bill that would eliminate taxes on all sales of gold, silver and precious metals. It is a little, but important, step towards freedom from the money monopoly held by the Fed, a bank that is allegedly central but which has only ever been a private banking cartel.

Bringing competition into this imposed monetary system could seize up the well-oiled mechanism of this bank which has had a century-long reign over the country's currency. This debt-based system that it intentionally founded, in which the kings are inevitably the lenders…". The notion is based on the ideological premise, prevalent in the English-speaking world, of "*Let's you and him fight*", i.e. that competition offers a solution to all problems…

However, in the case at hand, it is not so much a question of competition but of the location of monetary issuance. The trend is for diversification by an increase in the number of regional and local currencies[22], which we referred to in the introduction, without necessarily abandoning the major currencies, unless they are swept aside by a crisis.

In this respect, as means of payment have become more diversified (credit cards, payment by smartphone, etc.) and with technological advances, people can now make immediate payments in the legal tender of the place where they physically are. This is already the case in Scandinavia where, although Norway, Sweden and Finland all have different currencies, anyone can pay for their purchases on-the-spot with a single credit card. Things will become even simpler once payment by smartphone becomes mainstreamed, with telecom operators assuming part of the role currently played by banks. This is already happening in Kenya where operators have taken advantage of the lack of a credible banking system. In China, over half of all payments are now made by smartphone and it is on track to phase out paper money, which was first introduced in that country. Also in China, holding accounts (and debt management, etc.) has been partly taken over by Alibaba and other major trading platforms, and it is therefore, to some extent, no longer the remit of the banks.

If we assume that the 5,000 or so local and professional currencies currently in circulation could also make use of electronic communication and storage technologies[23], this could lead to an "uberisation" of money which would hark back to its original characteristic, namely to be based on trust. This would not be blind trust in an anonymous system managed by Wall Street, but the trust afforded to people or organisations who/which we know.

To sum up, we should first mention that building a civilisation driven by the financial community, as pictured by Nathan Rothschild in the early 19th century, became globalised in the 20th century and is continuing to extend its reach. This has happened to such an extent that, without giving it a second thought, in daily life, money is seen as a standard and the market acknowledged as a measurement instrument whereas, from a scientific standpoint, neither has the features required to assume such roles (all the more so if the banking system continues with the mass issuance of money). We therefore need to urgently "reconsider wealth" as the existing system is both unstable and predatory.

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(22) See the example of Wörgl described at the beginning of the paper.
(23) A number of telephone operators have already understood this.

In practical terms, we could, for instance, imagine rebuilding trust that is no longer based on a banking system buttressed by central banks. This is what is being tabled by blockchain software developers with the bitcoin and, especially, with the bancor[24] (so named as a nod to Keynes's proposal at Bretton Woods). This would involve total decentralisation of currency production which would be consistent with a business management more in line with citizens' wishes.

But this redirection will not suffice. We are well aware that climate change is causing wide-reaching global transformations such as melting of the ice cap, rising sea levels and the desertification of inhabitable areas. In light of the foregoing, instead of wondering "how to shape the monetary system to save banks' balance sheets?", would it not be more pertinent to consider how it could be organised so as to help solve the world's problems?

These problems are not insurmountable and can be addressed by the 21st century's technology. We are aware of the problems caused by drought and we know that climate change-related migration will involve hundreds of millions of people[25] during the century. There is currently no structure able to receive migrants to whom so-called "developed", but very short-sighted, countries are closing their borders.

To cope with these huge migratory flows, I would posit that currency production earmarked, amongst other things, for major works and for building reception areas in regions that are still underpopulated but which are now inhabitable due to global warming, such as Southern Siberia, Canada or Scandinavia, would be suitable or even essential.

To be clearer, to manage the planet and, in particular to avoid hyperinflation and wars, it would be sensible to establish cooperation between bodies, especially the BIS[26] and the IMF[27] which, although set up at the outset for the benefit of the financial community, should, against the current economic backdrop, now serve the common interest:

- by closely supervising banks' activity (BIS), which is made possible by big data, so as to mitigate uncontrolled money creation, whether through high frequency trading or excessive investment in urban property

- by tasking the IMF with creating a sufficient volume of money to fund the major infrastructure investments needed for the smooth running of the global economy in the 21st century (management of water, transport, education and energy supply, particularly in areas hosting migrants).

(24) https://en.wikipedia.org/wiki/Bancor
(25) See the OECD book, "Securing Livelihoods for All: Foresight for Action", 2015.
(26) Bank for International Settlements, an institution based in Basel, which drew up the renowned Basel I, Basel II and Basel III Accords which contain rules that are incomprehensible for mere mortals.
(27) International Monetary Fund, set up after the Second World War at the Bretton Woods Conference, as a venue for dialogue between central banks.

The current substantial imbalances undermine the credibility of the financial community, which undertakes cosmetic reforms whilst avoiding the underlying question: is this community self-serving and striving to extend its influence, consistent with its behaviour over the last two centuries, or is it serving the common interest of the world which is faced with the risks of a collapse comparable with the Great Depression in 14th century Europe?

As a result, an especially serious crisis of trust is probably looming[28]. And, as we stated in the introduction, money is first and foremost based on trust.

Bibliography

Aglietta M. & Orléan A. (2002), "*La Monnaie : entre violence et confiance*", Éditions Odile Jacob.

Bertholet C. & Létourneau L. (2017), "*Ubérisons l'État avant que d'autres ne s'en chargent*", foreword by Xavier Niel, Éditions Armand Colin.

De Foucauld J.-B. (ed.) (2016), "*Peut-on apprivoiser l'argent aujourd'hui ?*", Cerisy Symposium, Éditions Hermann.

Graeber D. (2013), "Debt, the first 5000 years", Melville House. Lietaer B. and Kennedy M. (2008), *Monnaies régionales*, foreword by Michel Rocard, Éditions Charles Léopold Meyer (English title: "People Money: The Promise of Regional Currencies").

Lietaer B. (2013), "*Au cœur de la monnaie : systèmes monétaires, inconscient collectif, archétypes et tabous*", Éditions Yves Michel.

Lietaer B. (2007), "*Mutation mondiale, crise et innovation monétaire*", Éditions de l'Aube.

Lord Turner Adair (2017), "Between Debt and the Devil: Money, Credit, and Fixing Global Finance", Princeton University Press.

(28) It is of particular relevance to compare the current situation with that of the early 14th century in Europe which led to the collapse of which we are all aware.