THE DEMOCRATIZATION OF THE BANKING MONETARY SYSTEM SO AS TO GRANT THE FREE BASIC INCOME WITHOUT DEBT CRISES. ALTERNATIVE SOLUTIONS THROUGH DECENTRALIZED DIGITAL CURRENCIES

By **Konstantinos E. Kyritsis**, ckiritsi@uoi.gr, University of Ioannina Dept. Accounting-Finance and **T. Pappas,** thpappas@uoi.gr, University of Ioannina Dept. Accounting-Finance,

Abstract

In this article we analyze the ability of the monetary-banking system, to support the free basic income that eliminates poverty without creating periodically debt-crises. We discover 5 toxic anti-democratic functions of the banking monetary system that create periodically debt crises. The free basic income is unfortunately not possible to derive from taxes only as it is a too large expense for Governments, so it has to be derived directly from currency issuing by the central bank. By democratizing top-down the monetary system not only periodically debt-crises are not created but also the free basic income can be granted. Alternatively, the poverty may be eliminated with the free basic income through bottom-up alternative decentralized non-banking digital local or global currencies. We state the necessary principles for such currencies (governmental or not) and we give 2 examples of them which are fully taxed within the old banking currencies.

Key words: Banking monetary system, free basic income, poverty, debt crises, alternative digital currencies.

Subject Classification JEL: G21, G28, H30.

Introduction

The **United Nations in the recent years has declared a planetary scale campaign to eradicate poverty from the planet**. This cannot happen without changing the banking monetary system in the economies. The main function of money here is as right to access basic goods in the planetary life. **With the current monetary and banking system the basic income is not possible to be granted through taxes by the politicians, and so the poverty as an epidemic will rise and lead many people to commit suicide, end in mental hospitals , die earlier or live in permanent depression and poor health. In this way the impersonal system becomes the big predator that as lion of colosseum with the early Christians, or as a modern minotaur devours the men in poverty. A clear case of a regressive rather than progressive economy.**

The monetary system if cured from its current toxic and antidemocratic functions can solve this major indirect evil on our societies (significant percentages of poverty). It can be cured either top-down through join political power or bottom-up through the initiative of the majority in new concepts of money , crypto-currencies etc.

In the next 2 paragraphs we will discover the basic 5 toxic, poverty creating and anti-democratic functions of our monetary system that characterize our economy and our civilization. Their toxicity is relative to an ethical economy dedicated to serve the **evolution of the human immortal soul**.

The next 5 toxic and non-democratic functions of the banking monetary system, are the **main factor** behind all other catastrophic events in the present economy as we live not in capitalism (that was before 1690) but in the capital debtocracy. It is the main factor that makes our economy a **regressive** rather than **progressive economy**. This factor is the main factor behind the **periodic debt crises, massive bankruptcies, high percentage of poverty, lack of basic income, unhappiness and financial misfortune of the majority of the economic organizations the last 3 centuries**

These toxic and non-democratic functions of the banking monetary system lead to the **lack of the ability by the governments to grant the basic income to the citizens,** which is the most obvious large-scale phenomenon of economic **half-slavery. The basic income is a basic economic human right**. And as in the ancient Roman civilization the most obvious evil was the existence of slavery, so in the modern civilization the most obvious evil is this economic half slavery. This **half-slavery due to lack of basic income as main source of misery unhappiness and poverty, is our blind point** in perceiving our civilization. This in its turn creates permanent large percentages of the population being in poverty which characterizes our civilizations **almost as an evil civilization**. And it is so because it is not a result of meritocracy, (people with virtues will never be poor) but as if in a large scale statistical Russian roulette, it is **a systemic crime**. Even if all people were identical clones of the same person, all of the same abilities, this phenomenon of high percentage of poverty would still happen

For an evolution of our civilization to a more human civilization which would support as a priority the evolution of the immortal human soul consciousness, it is critical to invent and discover **new concepts and functions of money**, much better that the current function of money issued by central banks. In the same paragraphs we describe the top-down resolution of these toxic and anti-democratic functions The 3rd paragraph describes new concepts of money including the digital currencies with technologies like the blockchains or other that may **heal in a bottom-up way the toxic and anti-democratic functions**

2. Collective majority's good in a democratic economy that serves the evolution of the human immortal soul.

Here we set the standards of 1) **democratic principles** and the 2**) priority of the social good in favor of the partial and minority profit of the selfish individual entrepreneurship.** Moreover, we reassure the value of personal and social freedoms and reduced social inequalities compared to intensified inequalities and the recession of the latter. Hundreds of statistical analyses originating either from Universities of from the UN (see [1] Richard Wilkinson: How financial inequalities harm societies), prove that the significant economic inequalities and the lack of the free basic income severely affects society and increases:

a. Criminality,
b. Suicides and mental illness,

c. Severe anxiety and desperation
d. The reduction among the young members of society the ability to learn,
e. The decay of the ability of collaboration in the production sector.
f. Also, the increase of inequalities according to statistical analyses in several countries, is related with reduction of GDP (see [2]) and, in general, a reduction of speed of evolution while, a significant part of the population is not appropriately contributing due to social exclusion.

Additionally, we should note here that while the belief that the major goal of each individual is social status improvement and money or, possibly, social reputation is central, the real long-standing value is the 3) **serving of the soul consciousness evolution** rather than the access to social power.

<u>Finally, in nowadays society where everything is access only through the right of money, there is no notion of individual freedom when income money is absent and in particular in the absence of the free basic income.</u> Individual freedom would begin from an undeniable **human economic right** to a minimum free and life-long basic income (or survival subsidy), much like social health insurance. However, nothing similar exists and it is impossible to be granted by the politicians through taxes (vary large sum of annual expense), while the unavoidable resorting to the issuing of currency is blocked by the despotism of the monetary banking system. *In this way, amidst the last 21 century financial crisis like the current one (2009-2021), a long-term unemployed individual (especially in poorer countries with one only year only unemployment subsidy), must choose between recruited to criminality or resort to a gradually trapping and bankrupting, bank debt.*

Living in a society without free basic income is like walking unarmed in the jungle, while living in a society with free basic income is like walking in a civilized park.

Is the social economic ontology also the social economic deontology? Or in other words, is the way that the monetary banking system functioning (ontology) also the deontology (meritocracy) and monetary optimality? As we shall present in this article it is not at all so.

There is a duality of **regressive and progressive function of our institutions and economy**.

In our civilization, the conduction of institutions, and exercise laws, rules, sciences, and arts are, supposedly, in the name of social good. However, based on the key principles we mention and especially that of the serving of the evolution of the human soul consciousness, the actual result is, oftentimes, social harm, existential trauma, and the violation of the above-mentioned principles. This may be called the regressive exercise of the institutions as compared toa progressive exercise of the institutions. Given the principle of the benefit of the majority, that we mentioned we may diagnose as regressive act of an institution, science or art if it is done for the benefit of a minority oligarchy and against the benefit and well-being of the majority and the overall social good, even if the usual legal formal procedures are used.

It is important to note how regressive practice of institutions, sciences and arts may occur under a typically legal framework, either due to the law themselves being inappropriate and unfair or because there are not yet notions and laws that protect such sides of social good. E.g., the notion of a financial crime is relatively new and, hence, there are not yet sufficient laws that clearly define all its forms. As a result, **a large financial crime may be conducted totally respecting the current laws**. Such is e.g., according to this **study the blocking in the financial system of the ability to grant the free basic income.**

3. The three pathologically toxic and anti-democratic functions of the national central bank.

In this paragraph we describe three pathologically toxic and anti-democratic functions of the central bank. The term **"toxic"** financial product or service is widespread in financial analysis. The same banks characterize red loans as toxic products. The term" **pathologically toxic"** is also used quite often. E.g., in one of his speeches, Loukas Papademos, the former president of the European Central Bank, in 2011 in the Greek Parliament, used this term describing the situation of the economy in the current crisis.

Most of the national central banks in the Eurozone are public, except that of Italy, Greece and possible very few other countries. But even when public banks they have by laws special independence in d3ecisions about from the Government and the parliament.

The independence of ECB is guaranteed by article 130 of TFEU (Treaty on the Functioning of the European Union, former article 101 of TES, see [9]), which states that

"***During the exercise of power and fulfillment of duties and obligations assigned under the Treaties and the habitude of ESCB and ECT, neither the European Central bank nor the national central banks nor any other member of the decision-making modules of these institutions should not be given or accept guidance from other institutions or organizations or from the government of a member-state or any other organization***."

Here is therefore the root of **anti-democratic despotism**, and lack of wisdom in the monetary decisions, as the collective intelligence of the Universities, parliaments, governments etc. of the eurozone is by far a superior intelligence expertise and wisdom compared to a tiny minority of bureaucrats of the central bank. We enlist her the 3 the toxic anti-democratic functions of the central bank

1) **Monetary Despotism or forced pre-emptive control of money issuing**

The governments have lost their decision-making ability as far as currency issuing is concerned. Not only the can't take decisions so as to issue currency according to investment demand or other social demand (e.g. basic income) but they are also obliged to borrow it from the central bank either it is private or a public bank! The central bank essentially supplies money based only on the demand for debt, nor for investments or other social issues (thus very often the term **debt-currency**)

The central organization that issues money , is a bank and not a not-for-profit organization , <u>that is it only lends money and demands it to be returned to its hands which has been issued and, necessarily, lent to the</u>

society. This and only central monopoly demand of return all the active money is pathologically toxic and creates a vast central dependence of the entire economy from one and only monopoly bank! However, here we focus in the fact that a very small number of employees and bureaucrats decides upon money, its issuing, the lending rate of interests and their circulation as if they knew about the social good better than the collective intelligence of the society, its universities, its parliaments and its governments.

Here is a list of financial-monetary decisions which a government has, lost the right to take, either due to a local national private central bank or due to the Maastricht Agreement, after its inclusion in the EU.

a. **It cannot decide when and how much money to issue.**
b. **Either the central bank belongs to the state (public central bank) or not (private central bank), the government must borrow the issued money and, actually, return it to the central bank which is like it does not belong to the state or the people.**
c. **It cannot - and has not a right of to determine the borrowing rate of interests of the issued and borrowed money.**
d. **It cannot issue money and channel it to the society without debt, e.g., with by subsidizing or investments.**
e. **The monetary system with central bank and not a central not-for-profit organization is from the beginning non-solvent and condemned to lead periodically to debt-crises.**

This twisted toxicity of the public borrowing the public money is like the Greek proverb ***"Come on grandpapa, I will rent to you your own lands to cultivate, but do not worry, I will give you dividend from the rents that you give me"***

Let us see a numerical example. The central bank issues e.g. 10 billions of a currency. The state has a need of 5 billion which is needed for new social investments and is obliged to borrow it from the central bank (even if it is a state and not a private one). Thus, it is charged with 5 billion which it is obliged to return to the central bank through taxes etc. While the alternative, would be to issue money, by a not-for-profit public organization which falls under to Ministry of Finance which would issue these 5 billion that would belong to the state without any borrowing, zero interest rate and return obligation. Obviously, the first scenario is not of the state's benefit! It is even worse when the central bank is private and issues currency for which the rule of gold is not into effect, which could easily be issued by the Ministry of Finance. The issued currency does not belong, not even typically, to the state but to publicly unknown individuals who, thus, have power onto the state and the national economy, as a whole. **Obviously, that is against the national benefit and, as a result, since 1974, when the rule of gold was abandoned, such a private central bank (e.g., the bank of Greece, in Greece) violates article 102.6 of the Greek constitution.** This article states that

"Private economic initiative shall not be permitted to develop at the expense of freedom and human dignity or to the detriment of the national economy".

Similar articles exist in the Italian constitution and of other countries, except …the German constitution! It is even more scandalous when a private central bank (like n Greece and in Italy) even as an private but privileged enterprise has also **the right to issue laws of the state** about the banking sector and the public finance!

The same applies to the case when ECT, the central bank of euro, which is, in a way, affiliated to the Bank of Greece, up to a percentage, when it issued during the Quantitative Ease, 80 billion per month out of zero.

The central bank does issue currency only during Quantitative Ease. It does issue currency almost automatically when ever the current years demand for debt by the commercial banks is higher compared to the previous year. And this is apparent by the diagrams of the volume of Euro, in the publications of the ECB, which was continuously increasing before Quantitative Ease. This is essentially the inflation character of our monetary systems. This applies similarly to the US dollar too.

Someone might wonder if this was always so since the ancient times e.g. in the Roman empire and ancient Greek Athens. It was not so at all! Public currency was issued only by the public or the ministry of economics never private or public banks! It was essentially an unfortunate historical occasion of English state bankruptcy of 1694.

This pathologically toxic function of central banks appeared for the first time in the history of contemporary western civilization in 1694, in England, when, due to the 50-year war with France, the gold of the state had been exhausted and England was, practically in bankrupt. Despite king's Charles and his daughters, Maria Stuart, objections, Cromwell managed to pass, after their death, a law in the parliament to enable individual bankers to issue the English state currency though their own gold, (see [4). To avoid a further social turmoil, this private central bank was named "Bank of England". The same happened within a century to most of the European countries, under several underground pressures.

After World War II, the state of England, fortunately, took under its control the issuing o the currency and turned the "Bank of England" into an independent authority public bank. Unfortunately, however, currency is not being issued by the Ministry of Finance, but, by a bank ("Bank of England") which is "independent". That is, the problem has not been completely corrected. The same applies to the most European countries. However, Greece and Italy still have private central banks.

Here are some opinions of great presidents of the United States about this issue.

In the United States, Abraham Lincoln, after his win in the civil war and the liberation of black people, wanted to establish a public central bank which would issue state dollars. But he was murdered.

"The government should create, issue and administrate all of the currency and the credits needed to fulfill the purchasing power of both the government and the consumers. With the adoption of these principles, the taxpayers will save large amounts of money and money itself will stop being the governor and ruler of humanity and it will become a servant of it." Abraham Lincoln.

The next presidents, such as Roosevelt and Johnson were against the establishment of a private central bank which would issue the dollars, despite the pressure to do so, due to the obvious reason of it being non-profitable for the state. Notably, a failed murder attempt took place against Johnson, who, as per his words, was proud to have set an obstacle against the establishment of such a private bank.

“Currency minting should be assigned to the central government and be protected from the rule of Wall Street. We are opposite… to any law that would let our currency and financial system in individuals.” Theodore Roosevelt.

However, the next president, Wilson, accepted this and at 1913 the major private central bank of dollar, Federal Reserve, was founded (see [7], and [8]). The federal reserve bank is related to banks of the states, in a similar way that the ECB is related to the national central banks, in the eurozone. The agreement of the establishment of the Federal Reserve Bank is similar to the Maastricht agreement.

As Wilson he stated, a little before his death, he considered this to be his life’s greatest sin.

“I am a vastly depressed person, I have, unwittingly, destroyed my homeland. A big industrial nation (the US) is now under control of the financial system which has been centralized. The development of the nation and all our activities are in the hands of some men, these of the bank system. We have become one the worst governed nations, one of the most controlled governments in the civilized world. This is not, anymore, a government with free will, but a government under the will and power of a small group of dominating men of the financial system.” Woodrow Wilson

Also, note that even the popular figure of the Italian fascism, Benito Mussolini, agrees. He was someone who of course knew very well what fascism means.

“Fascism should be, more accurately, named private-partnership, since it is the partnership between the state power and the power of the private enterprises.” Benito Mussolini.

This is what the wise writer Tolstoy once said:

“Money is a new form of slavery, which differs from the previous one only in the fact that it is impersonal – that is, that there is no human relationship between the ruler and the slave.” Leon, Tolstoy.

DIAGRAM 1.1

FORCED PREEMPTIVE CONTROL OF MONEY ISSUING, (MONETARY DESPOTISM)

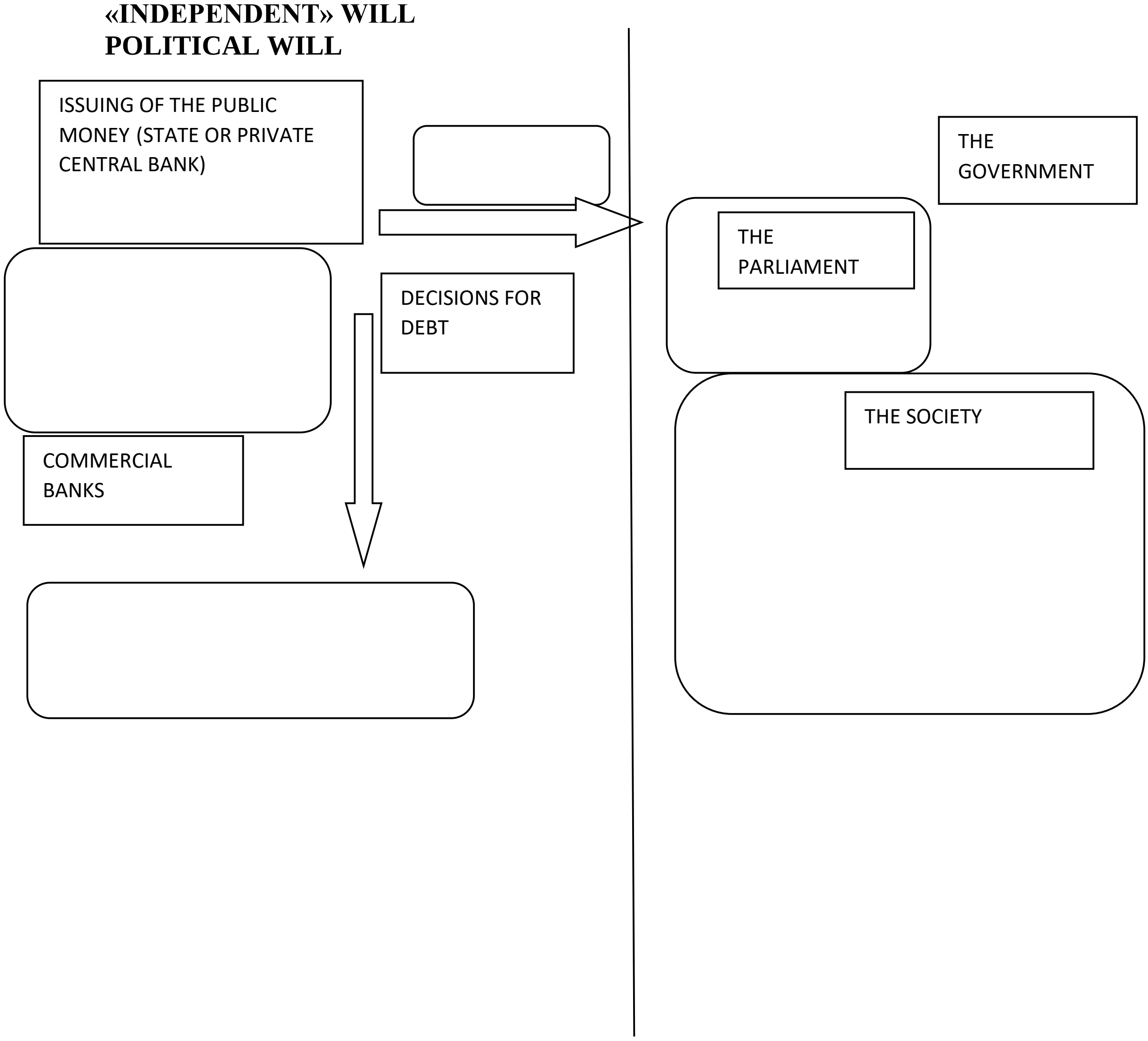
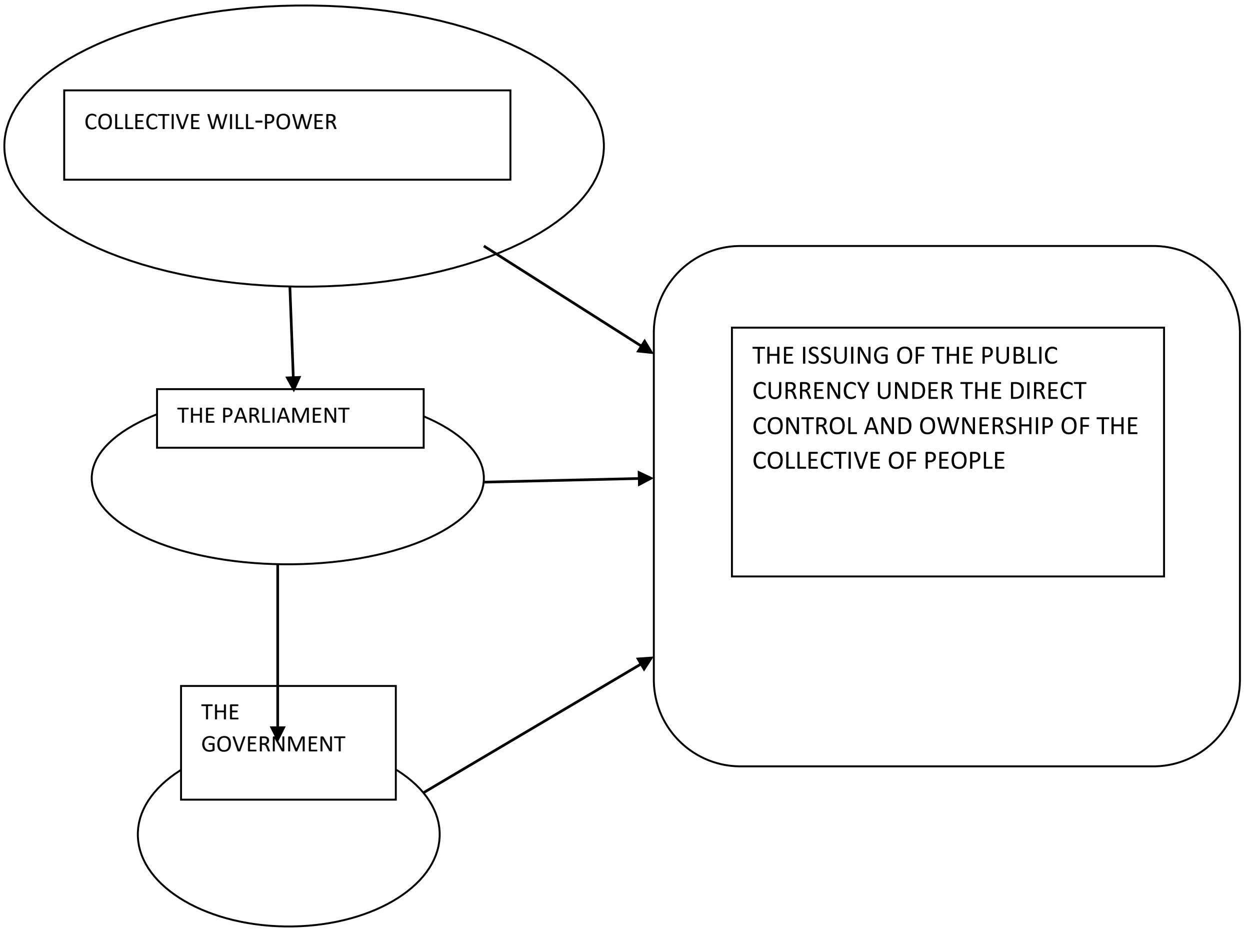


DIAGRAM 1.2

TOP-DOWN RESOLUTION OF THE FORCED PREEMPTIVE CONTROL OF MONEY ISSUING, OR MONETARY DESPOTISM. (IN THIS WAY THE BASIC INCOME BECOMES FEASIBLE, so the main indirect evil of poverty in the society can be resolved)



2) **The monopolistic pre-emptive propriatisation of the issuing of the public currency.**

The toxic and anti-democratic function refers o private central banks. Normally, when money was issued before 1694, it was a public good and it belonged to the state, that is, equally to all! And this is a socially and macro-economically right. For the central bank to be private is like all the military weapons of a country being property of a private company… independent of the government and the parliament. So, whether there is a war or not is being decided by this company based on its financial benefit!

Today, the central banks of Greece and Italy are private, while these of Germany, France, England and Spain are public.

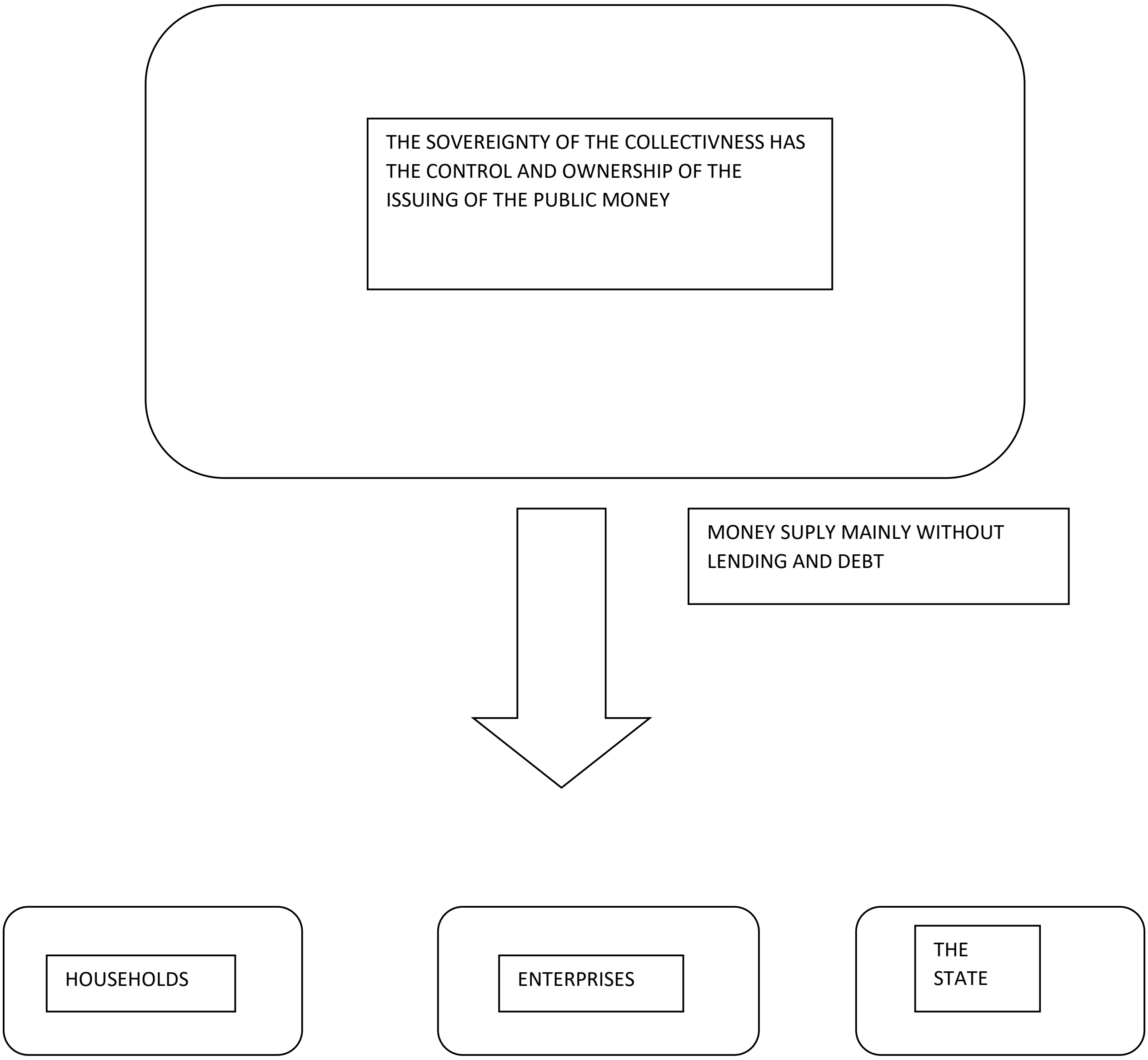
It is also obvious **how private central banks violate the European legislation about monopolies** (in the US it is called legislation about trusts), since they are private monopolies (of lending the issued money). Even if their functioning was for the nation's benefit, they would violate this name excluding exceptions. With the same logic, every branch could allow for the exceptional existence of a monopoly in it, which is of course unacceptable.

When the central bank issues new currency, it records it to the accounting system in its assets when it is lent to another commercial bank and is also recorded to its liabilities as if it does not own it and is borrowed from non-one ("to the bearer of the bill"). Since the bearer of the bill is, again, the borrowing side, it means either that no one has to payback the debt or that the central banks is in debt to the totality of the people. We must not forget that there is no rule of gold in issuing currency. This is crucial and we will, return to this point in the toxic functioning of commercial banks of money-issuing middleman role in the next paragraph.

Schematically, the solution of this pathologically toxic function of the private central bank is described in the next diagram 2.1.

DIAGRAM 2.1

THE TOP-DOWN RESOLUTION OF THE FORCED PROPRIETARY MONOPOLY OF THE ISSUING OF THE PUBLIC CURENCY



3) **Macroeconomic forced debt.**

It refers to the fact that the central organization which issues money is not a not-for-profit but a profit-seeking bank and, indeed, a non-investment bank, that is, in order to let the money it issues to circulate, **it has to and is obligatory to lend it** to some organization! It is very important to **discriminate that this necessity lies only on a macro-economic and statistical scale and not in a personal individual scale.**

Banks, however, cover that, often claiming that debt is only optional and only if one wants and is capable of engaging. It is optional only at the individual level of the borrowing organization, while it is imperative in the overall statistic of the society and the economy for the issued money to circulate, due to the **monopoly nature of the banknotes issuing** by the central bank and the fact that **its only lends as a bank.**

This pathologic toxicity is clearly seen e.g., in the case of the first totally private National Bank of Greece which, at 1842, began issuing for the first time drachmas in banknotes, which never existed before, as the country was newly established. E.g., let's say that is issued the first billion of drachmas in banknotes, which, in order to circulate in Greece, should be offered as a loan to the Government and the rest of the individuals, e.g. with an interest rate of 2%, that is, it asks a return of 1.02 billion drachmas. How will these 0.02 billion drachmas = 20 million drachmas will be found since only the National Bank could issue money based on gold? Obviously, the monetary system is non-solvent from its very beginning. Accounting currency will be created, that is, accounting claims records (currency M1, M2, M3) which are more as an amount compared to the amount of the banknotes in circulations in drachmas and, at some time, the system ends up collapsing, the financial enterprises even the public economy bankrupts and the with the red non-served loans appear.

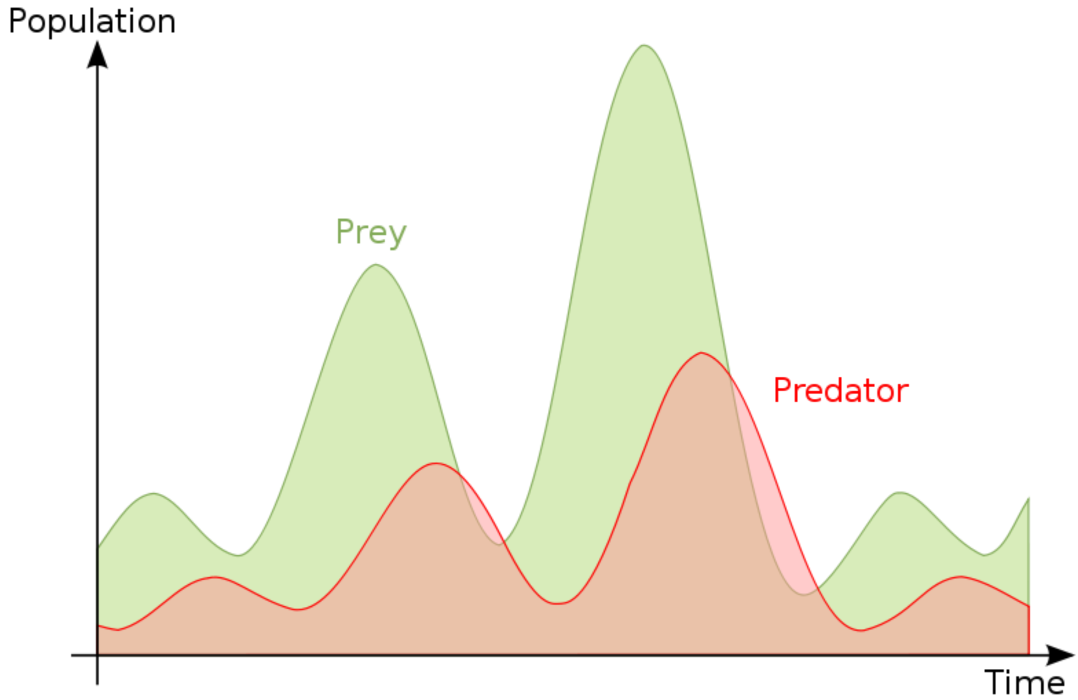
This macroeconomic forced debt leads the European enterprises to have, in average, 60%-66% of their assets in borrowed capital from banks, that is, double from their own equities capital (see Financial administration II, G. P. Artikes [14]). This means that they own their enterprises , only typically, while, from a financial viewpoint, the enterprise to the borrowers and the banks. **It also means that they become financially unstable, like paper tower of bank-contracts , which in the first financial earthquake, due to changes in economy, they will collapse and bankrupt in the form of financial debt crises.**

German mathematicians, using computer simulations, have proved that, indeed, such a banking monetary system collapses periodically, enforcing enterprises, households and states to go bankrupt (see [15], Gradido currency, Bernd Hückstädt (Author)) while other forms of non-banking monetary systems are stable.

Because of the forced debt the Governments are not able to grant free basic income for the citizens. The taxes only by far are not sufficient. And as we mentioned this is the main evil characteristic and half-slavery of our economic system. The main indirect source of unhappiness, misery, suicides, mental illness, poverty, non-contributing talents in the society, reduction of productivity, psychological

<u>cruelty, less number of families less number of children, deceleration of civilization evolution less innovation and existential traumas.</u>

The bank system, through debt acts as a parasitic or ravenous population (predator) with its prey being the rest of the economy. For such interactions between population, the Lotka-Volterra equations do hold (see [16]) which forecast the periodic destruction of the host (the rest of the economy) as well as the parasite (the commercial banks).



Therefore, the appearance of red loans as a significant proportion of the economy is an actual statistical fact for which the bank-monetary system is responsible, even if at the individual scale the debt remains an uncertain event. It is like an epidemic. We may forecast the percentage of people affected per year, but not if an individual will be affected or not.

Thus, judges for red-loans in such debt crises should not hasten and blame the borrowing side in cases of red loans, with the thinking such as "it was the borrowers's fault and bad management of risk". **On the contrary, they should lay the blame on the banks. As industries polluting the environment with toxic waste are required to pay penalties , the same should apply to banks, which pollute the economy as a whole with excessive forced debt.**

Unfortunately, these pathologically toxic functions of the bank monetary system are not, anymore unavoidable evil, after the abolition of the rule of gold, but, **they are simply bad collective financial habit of the society.**

The influence on the society of this pathologically toxic function of statistically forced debt is, at a large extend, destructive in a periodical manner. **This, obviously, leads to a deceleration of development, productivity, and evolution of the society.**

The above constitute the pathologic toxicity of forced-debt and are schematically described in the next diagram, while the cure of it is describe in the diagram right after it

DIAGRAM 2.2

MACROECONOMIC FORCED DEBT

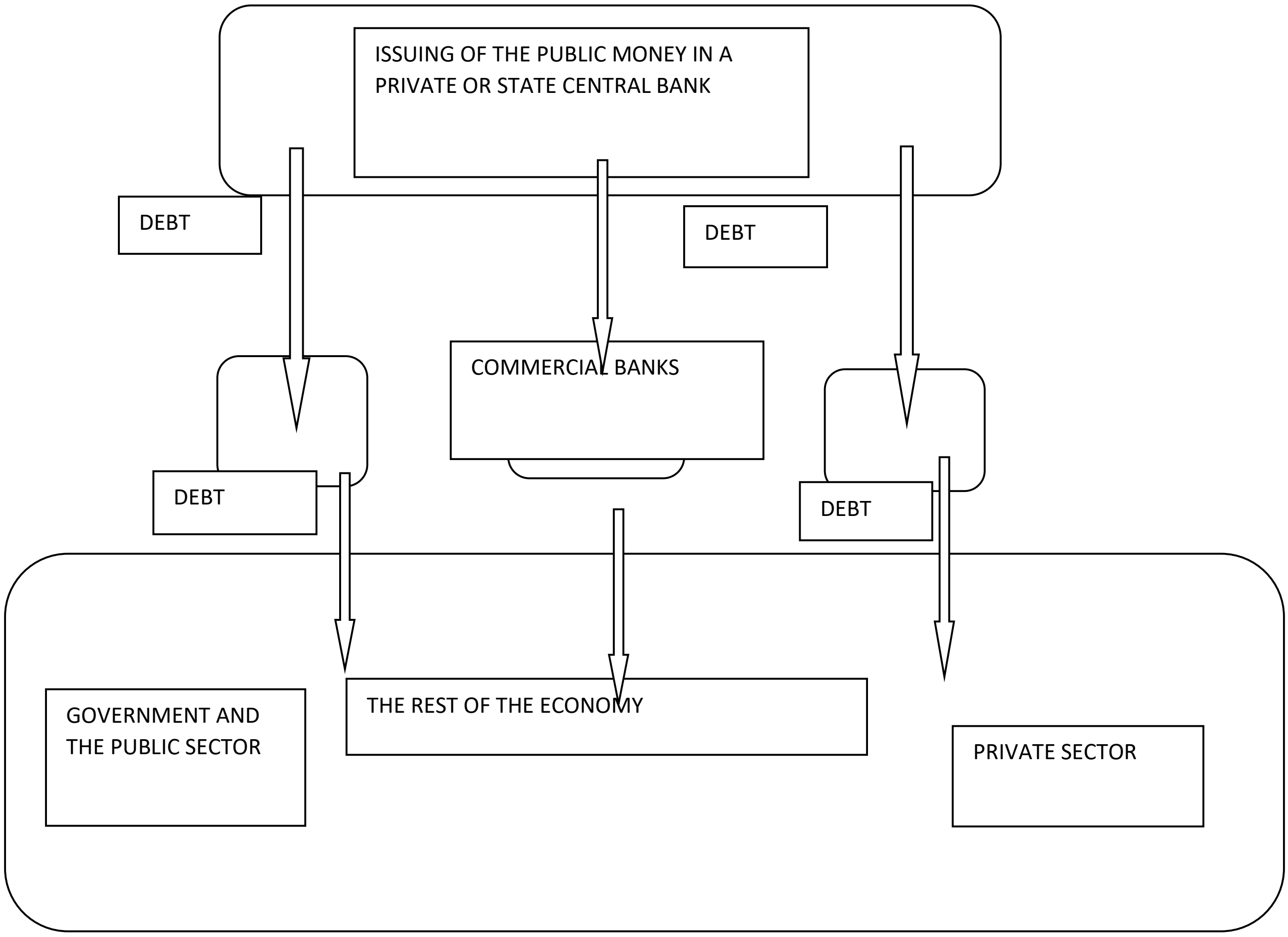
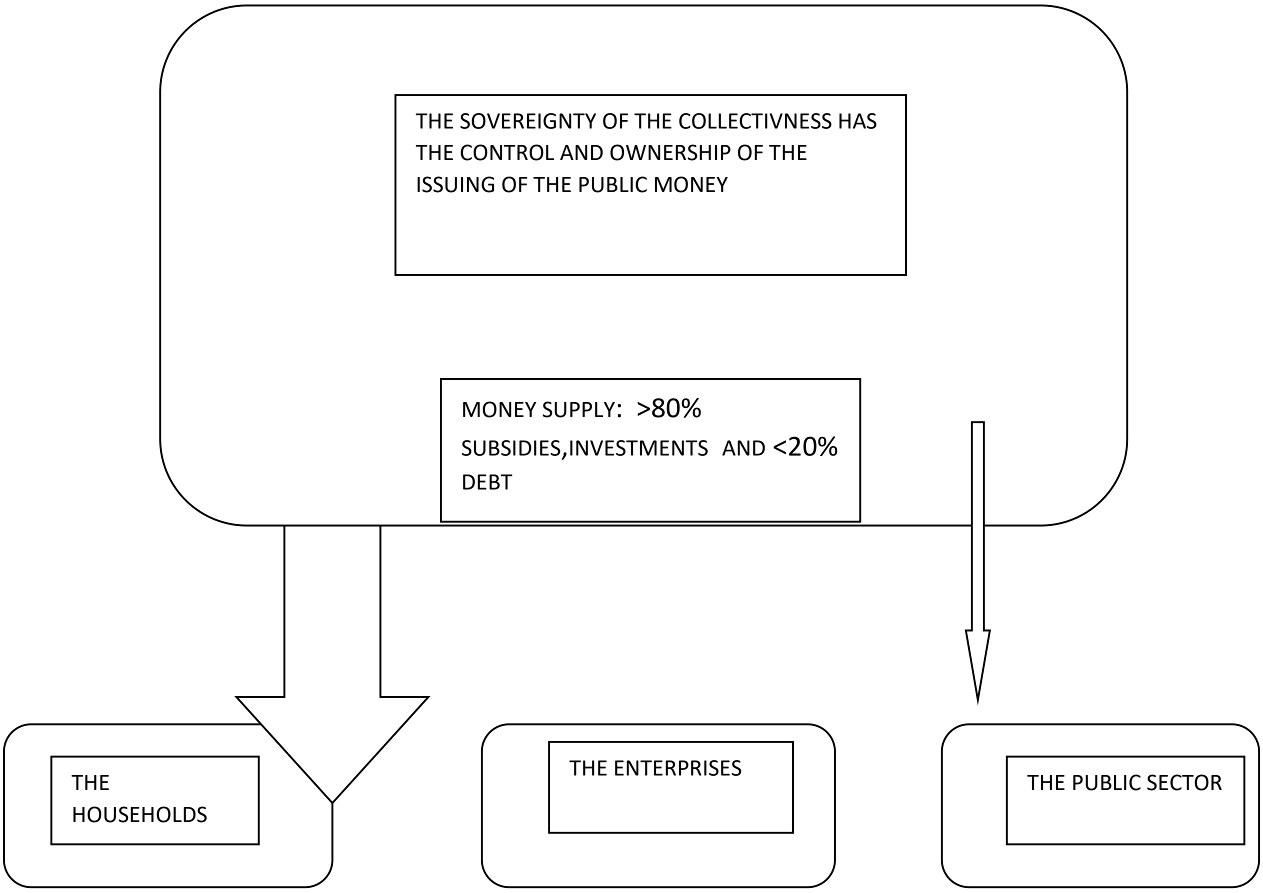


DIAGRAM 2.3

THE TOP-DOWN RESOLUTION OF THE MACROECONOMIC FORCED DEBT

(IN THIS WAY NO DEBT CRISES ARE CREATED PERIODICALLY)



The next table 1 analyzed the mainstream believes about the central banks and the underlying reality.

Table 1 Central Bank

Major believes about the central bank	**The reality of the central bank's functioning**
1) The way central banks function is the perfect, for the benefit of the majority, and it has been decided by the government	**1) The way central bank functions is pathologically toxic and anti-democratic for the majority but vastly beneficial for an oligarchic minority and has been determined by tragic historical circumstances against the power of the governments, while staying mostly unchanged in the centuries after.**
2) The central bank stabilizes the economy	**2) The central bank sustains only the pathologically toxic and anti-democratic function of the bank-**

	monetary system, which periodically creates debt crises.
3) The most important task of the central bank is to determine interest rates	3) The most important task of the central bank is to issue banknotes.
4) The central bank, either private or public, should be an independent authority relative to the Government(s) and decide autonomously, since government(s) and the parliament are not capable of making good monetary decisions.	4) Decisions regarding the monetary system and banknotes issuing should be taken by the government(s) and the parliament(s) after consulting experts. The collective intelligence is superior to that of some employees and bureaucrats.
5) The central bank should be a strictly lending bank and not an investment bank, since, if there is no organization that controls through debt the society, there would be chaos.	5) If the central bank also offered the issued money through investments and not only via debt, it would better. It is the right rules that ensure a smooth functioning of the economy and not that the issued money is supplied only through debt.
6) Banknotes are being issued by the central bank only during Quantitative Ease.	6) Banknotes issuing takes place at any moment and automatically, whenever debt demand exceeds the previously issued currency supply. This is regulated by the fractional reserves rule or available liquidity of commercial banks, to which the central bank has committed itself, voluntarily.
7) The currency is issued by the central bank under certain rules, as a proportion of the GDP or the total wealth.	7) The currency is issued by the central bank according to the demand for debt by the commercial banks or during Quantitative Ease.
8) The central financial organization that issues money should be a bank.	8) The main financial organization that issues money should be a non-profit organization and not a bank. It became a private bank "temporarily" for the first time in England during 1694, since England had gone bankrupt due to 50 years of war.
9) Issuing currency that is not backed up by gold is a pathologically toxic function.	9) The value of gold is conventional, as well. Currency should be issued on the base of the size of the population and human productive ability (GDP). This is healthy and fair (Πάντων χρήματων μέτρον άνθρωπος=For all Money the measure is the human factor)

2. The three pathologically toxic and anti-democratic functions of the commercial banks.

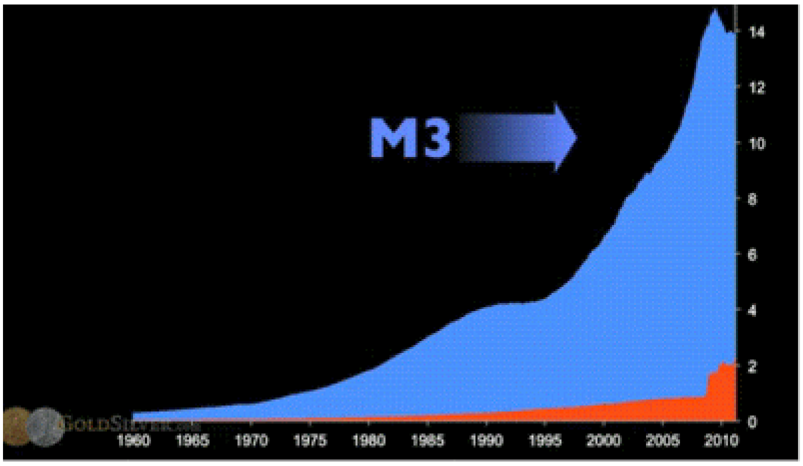
Passing now to commercial banks, the forced-debts , always at a macro-economic level and not an individual one, is a common pathologically toxic functioning of them, as well as of the central banks, which leads, with statistical certainly, to a periodic collapse of the financial system and the appearance, again with statistical certainly, of debt-crises and red-tape borrowers. The Commercial banks are also exhibit, however, two new pathologically toxic functions.

1) **Empty-lending.** (<u>the same banknote is being lent simultaneously to up to 100 borrowers while it actually remains at the bank</u>)

As we have written above, when, some centuries age, the fraud of goldsmiths and loan sharks, who were lending at the same time the same ounce of gold that had been trusted to them by depositors, was discovered, after hanging some of them, finally, governments were convinced, due to the lack of enough gold, to legalize issuing multiple receipts of gold deposition lending for the same ounce of gold, which were used, at that time , in the role of banknotes. Thus, today's **rule of fractional inventories** used by commercial banks, had been born, which, at our time, is called **rule of liquidity** (see [11], "Eurozone, Money and Financial System", Gikas G. Hys A. (2017) rule of liquidity for ECT.). According to this rule, the same banknote which statistically remains at the treasury of a trade bank can be lent to up to a hundred borowers (rule of liquidity of 1% of the total depositions in Eurozone). That is, commercial banks at a 99% rate lent "void" and not actual banknotes. Thus, commercial banks create **"accounting money" M1, M2, M3** (se e.g. [11], [12], [13], [14]) which are simply **claims of money in accounting records** and they depict the **money flow** in the society rather than the banknotes flow themselves. This should be seriously taken into account by judges in cases regarding banks and red-tape borrowers that they cannot serve their debt, in times of debt-crises. E.g. if in the treasury and liquidity accounts of a bank contain only 100 euros, the bank has the right to lent up to 10,000 euros which, in fact, it does not possess in banknotes. Thus, is has the right to ask for a loan from the Central Bank while this 1% rule is being reserved. The central bank usually considers this lending its obligation. And, if there are no banknotes stocks in the Central Bank available, and it is an excess money demand, in order for the central bank to meet this demand with money supply, **it can issue currency and banknotes under an automatic procedure, without this being considered a Quantitative Ease.** Currency and banknote issuing is called **Quantitative Ease** when it is done after a decision of the Central Bank, without any excess debt demand by the commercial banks. **It is know that during 2016-2018 the ECB issued 80 billion euro per month , out of nothing, simply typing these amounts into its computers, which have no value in gold.**

> **<u>Money issuing, without it corresponding to gold, is not considered pathologically toxic in the current bank-monetary system. For the same reason, however, digital currency issuing such as with Bitcoin and other crypto-currencies via mining by computer algorithms, should not be considered a pathologically toxic either.</u>**

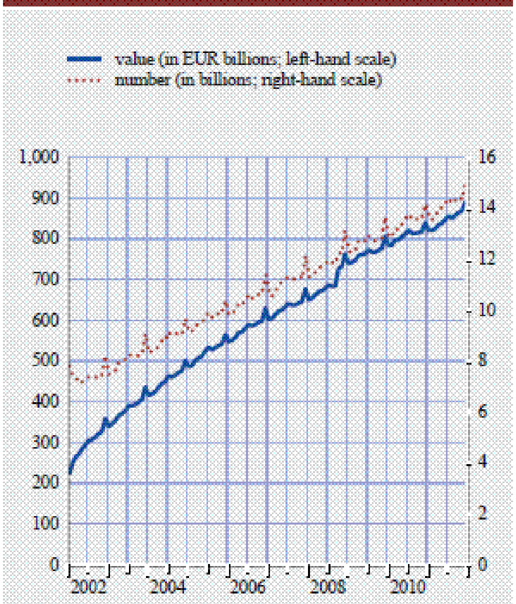
The well-known industry car manufacturer **Henry Ford** used to say, already during the previous debt-crisis of 1920-1930, that, **"if the average American citizen knew the way the bank system works, there would be a revolution the day after it".** But , even almost a century after and in the middle of the second large debt-crisis, average people, as if they have been hypnotized, do not understand the actual way that the bank-monetary system functions. Indeed, in a gallop in Switzerland regarding a possible Referendum regarding whether the state would continue allowing banks' **"void-loaning"** and the creation of **logistic currency M1, M2, M3** or not, **only 8%** of the population understood which subject that the referendum referred to.



The diagram above depicts the way the accounting currency M3 is decreasing in the US (the line above) while the number of issued banknotes is increasing, since they were issued by the central bank of dollar.

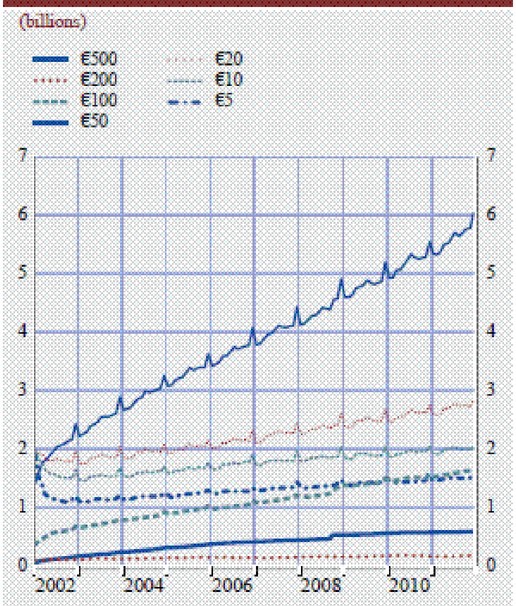
This leads, of course, banks to have a large leverage ratio, which is the bank's assets divided by the bank's own funds (which is above 10). After the abandoning of the rule of gold, there is no actual reason for this to happen, apart from banks' profits. The leverage ratio in the rest of the private sector is just about 3, that is assets/own funds=3. High leverage ratio means larger profits as a percentage of own funds but also **larger instability risk** in possible bankruptcies or crises. A leverage ratio of 3 is, already, rather high for enterprises, and it is a result of the forced-debt that has been described above, and is also the reason why they go bankrupt in a crisis like the current one. Not to mention of the >10 leverage ratio of banks, which led some commercial banks in Iceland, Cyprus and Greece immediately to collapse. The reduction of leverage ratio for the banks, in the form of a higher percentage of capital adequacy, is suggested in the guidelines of "Basel I, II, III" (see [17],) which are rules for the better functioning of banks. However, the suggested reduction is rather very low, lower than 2-3 percentage points.

Chart 35 Number and value of euro banknotes in circulation



Source: ECB.

Chart 36 Number of euro banknotes in circulation by denomination



Source: ECB.

94 ECB Annual Report 2011

The above constitute the pathological toxicity of **“void-loaning”** which is described in the next diagram while it cure is describe in the right next one.

DIAGRAM 3.1

EMPTY LENDING

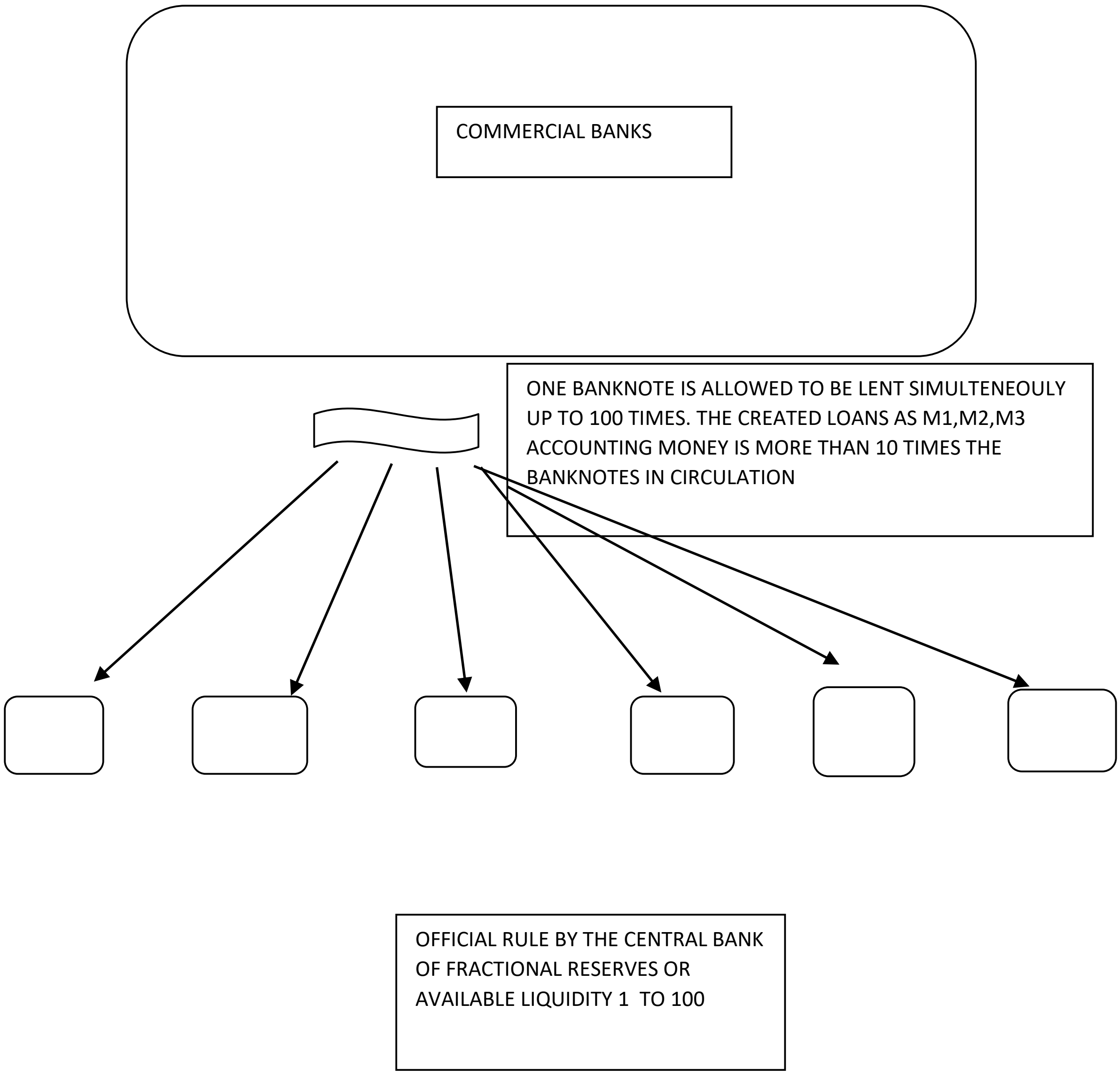
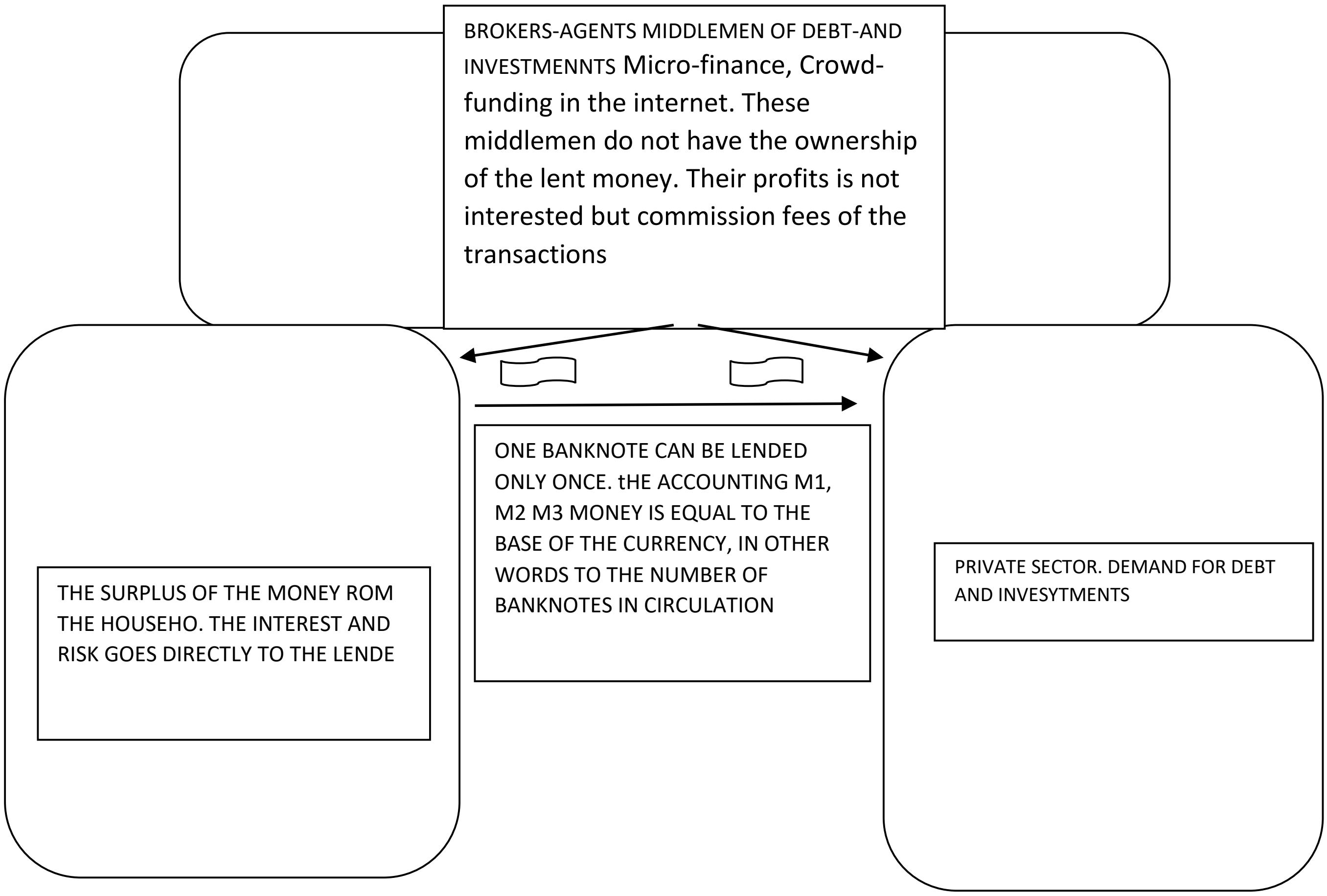


DIAGRAM 3.2

THE TOP-DOWN RESOLUTION OF THE EMPTY LENDING



2) Currency-issuing middleman role of the commercial banks

If we ask an average citizen or a traditional economist about the reason of the existence of the commercial banks, they will both answer that they exist so as to offer to the economy the service of collecting of surplus money from households or other financial units and channel it through debt to the private sector enterprises in order to facilitate the needed production within the society.

Is this, however, what commercial banks actually do? Or <u>the will to profit through debt</u>, almost at every cost, reverses and changes this role?

A brief look at the balance sheets and other financial reports of the main)system) banks in Greece reveals that, often and for some banks, even systemic ones, their main role is different and it could be called **"Currency-issuing middleman role"**. We see this e.g. in the balance sheet of Eurobank (see [27]).

During 2011, loans towards/and demands towards clients divided by the other credit institutions (the cheapest currency) divided by the loans by/and secured dues to the central bank and give ratio **74.69%**.

Take into consideration, however, that, in general, in balance sheets, the actual influx of surplus capitals from households through deposits is much less than deposits because loans that the bank provides are also recorded as deposits.

During 2012, for this bank this ratio was **73.7%** . During 2014, it was **54.42%**. During 2016 it was **78.3%**.

It is obvious now that this bank does not have the role people think it has, but it is simply a middleman in the currency currently issued by the central bank of euro (ECB)

As far as Alpha Bank is concerned, we see in its site ([29] **l**) and its published balance sheets that: During 2012, this ratio was **78%**.

As far as Piraeus Bank is concerned, we see in its site ([30]) and its published balance sheets that: During 2007, this ratio was **61%**. During 2015 was **68%**. During 2016, it was **56%**.

The above constitute the pathologic toxicity of **"Currency-issuing middleman role of the commercial banks " which essentially states that in most banks in most of the years the majority of the money that the lent does not come from deposits but from borrowing from the central abnks as the Katter is cheaper money.** In the next diagram we visualize it while its cure is described in the right next one.

It is significant for us to notice that **these 5 toxicities of the banking system are not a necessary evil but more of a bad financial habit of the economy (much like e.g. smoking and smoke industries, metaphorically speaking).**

DIAGRAM 3.3

MIDDLE MAN ROLE OF THE COMMERCIAL BANKS IN THE MONEY ISSUING BY THE CENTRAL BANK

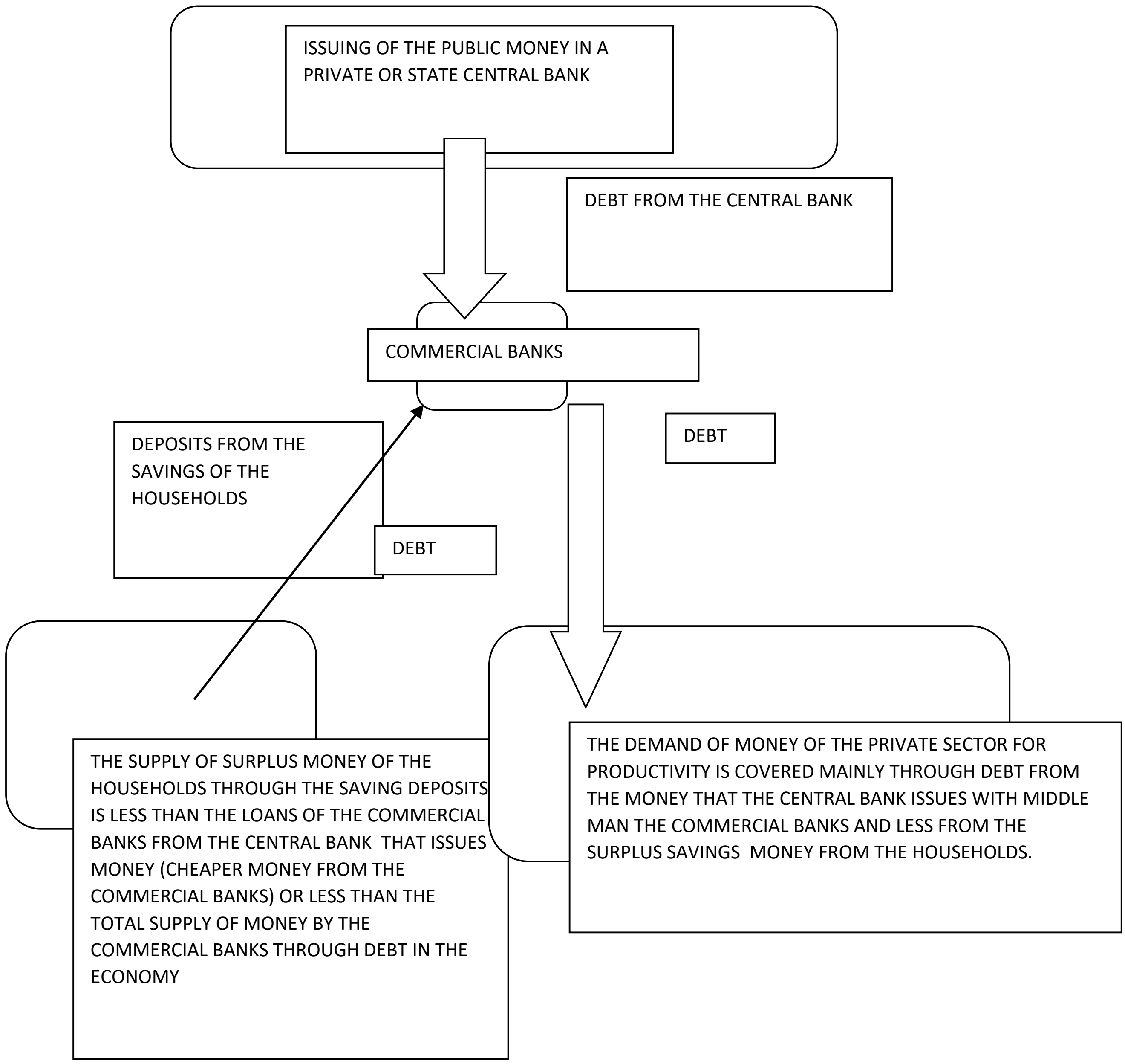
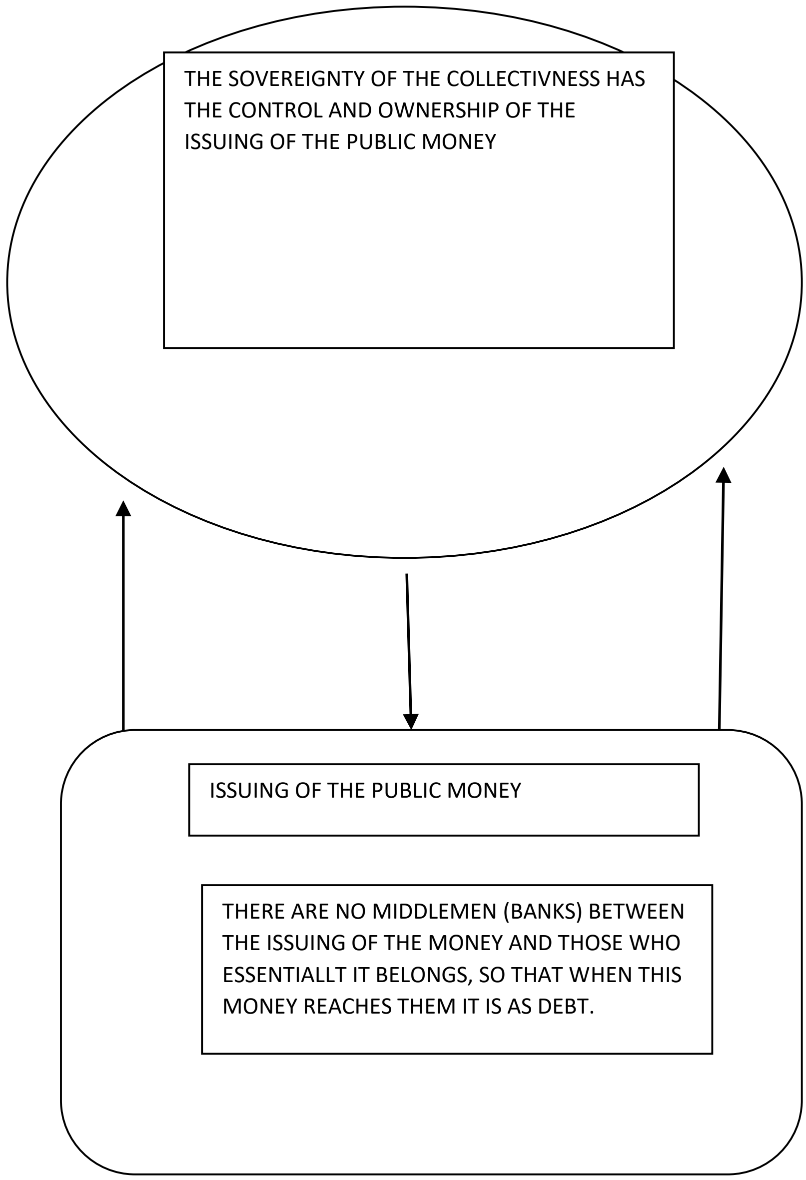


DIAGRAM 3.3

THE TOP-DOWN RESOLUTION OF THE MIDDLE MAN ROLE OF THE COMMERCIAL BANKS IN THE MONEY ISSUING BY THE CENTRAL BANK



Especially in Greece there is an extreme scandalous situation with the commercial banks which was mention in 2015 by the prime Minister Tsipras in a speech in the European parliament. He mentioned that more than 60% of the debt of Greece through the memorandums, and in particular 203 billion were given to the 4 big (systemic) private banks to stabilize them instead of being used for the public economy. The memorandums required that these 4 banks have now new owners that are outside Greece. This grant of 203 is more than double the red-tape non-serviced debt to the banks so it was an out of proportions act. Furthermore, the banks did not erase the red non-serviced loans to people and still liquidate even their only house they live. The 203 billion were given as follows

1) By law 3723 φεκ 250 2/12/2008 during the government of K Karamanlis 23 billion
2) Then during the government of G. Papandreou with laws N. 3845 ΦΕΚ 65 6/05/2010 15 billion
3) N. 3864 ΦΕΚ 119 21/06/2010 10 billion
4) N. 3872 ΦΕΚ 148 3/09/2010 25 billion
5) N. 3965 ΦΕΚ 113 18/05/2011 30 billion
6) Π. Νομ. Περ. ΦΕΚ 203 14/09/2011 30 billion
7) N. 4031 ΦΕΚ 256 09/12/2011 30 billion
8) 19/04/2012 40 billion ΦΕΚ ΑΡ. φ. 94

In total 203 billion

The next table 2 analyzed the mainstream believes about the commercial banks and the underlying reality

Table 2 Commercial banks

Major believes about commercial banks	The reality of commercial banks
1) The way the commercial banks function is perfect and beneficial to the majority.	**2) The way commercial banks function is pathologically toxic and non-democratic for the benefit of the majority. It aims at the owners profit and because of this, they should not have that much power within the economy and the society.**
3) Commercial banks always lend money to the enterprises as if the own it, which the mainly they derive from households though deposits.	**4) As can been seem in their balance sheets, of the commercial banks, at least in Greece, they lend money to enterprises, as if they own it, and most of the banks and most of the years, they lend money borrowed from the central bank or other sources because it has lower cost when compared to the one originating from the deposits of the surplus money of the households.**
5) The commercial banks are comparatively the most stable financial institutions.	**6) The commercial banks have the highest leverage ratio (>10) amongst enterprises (which have a leverage ratio of about 3), so, they have the largest profit but also the largest instability.**

7) The commercial banks, in the way they function, are the motor power of the economy and their existence is needed.	**8) The commercial banks after the elimination of the rule of gold, because of the debt that they force in the economy, drive the average enterprise to have an average debt capital equal to 60%-66% of their assets and, thus, they constitute an important impediment and danger for the economy and its development. Banks are not a necessary evil; they are a historically harmful habit of the past and misfortune for the economy.**
9) Due to this specific instability, bank should be granted with more and more privileges and power in the economy.	**10) Due to their actually parasitic profit through forced debt and their instability, the banks should be deprived of some privileges and new rules should be imposed while, gradually, they should be set aside as institutions.**
11) It is more important that the banks are saved rather than public economy , enterprises and households, thus in the bailout of Greece 210 billion, that is more than 60% of the memorandums' funds lent in Greece, were given to them.	**12) The example of Iceland shows that it is more important to save households, enterprises and public economy with new forms of economy, against saving the banks and the old forms of debt economy.**
13) Deposits in the commercial banks' balance sheets account for the influx of money from households and clients towards the banks.	**14) Deposits in commercial banks' balance sheets do not account for the influx of money from households and clients since as such are often recorded banks' loans towards their clients which are an outflow towards the clients.**

3. The Bottom-up cure of the 5 toxic and anti-democratic functions of (central also) banks <u>that can also provide the free basic income and eradicate poverty</u> with new uprising institutions of digital currencies and new local or global currencies.

Digital currency.

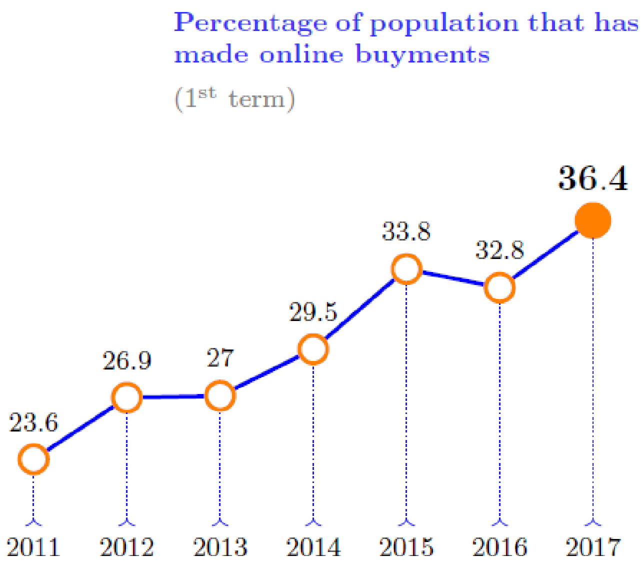
On October of 2017 the IMF director confessed that the future of the global globalization of currency is crypto-currencies with blockchains such as, e.g. Bitcoin etc. Monetary systems with digital crypto-currencies such as Bitcoin do not suffer from the 5 pathologically toxic functions of bank currencies. That is:

1) **They are not issued under monopoly by a central bank, so they do not suffer from forced antidemocratic despotism.**
2) **From the moment they are issued (e.g. mining for Bitcoin) their supply does not have to necessarily pass through the "gate" of loaning to meet the demand, that is, they do not suffer from "forced-debt".**

3) **Since, theoretically, anybody can issue crypto-currency though mining, they do not suffer from the abusive proprietary monopoly of their issuing.**
4) **Since they are not offered to the society strictly through banks, they do not suffer from empty-lending.**
5) **Since no bank interferes in a monopolistic way from their issuing until the cover of their demand from the society, the do not suffer from forced money-issuing middle man role.**
6) **Other benefits of them are that they are faster in currency transfers and remittances on the internet and in transactions, since no bank is needed to mediate with a 1-2 days valeur. But this advantage is the less important and if the central abnks issue digital euro and digital dollar, it will not exist as advantage.**

Of course, digital crypto-currencies are not the only forms of digital currency that does not suffer from the 5 pathologically toxic functions we have described. Probably, the biggest benefit of humanity from the spreading of digital crypto-currencies is that they have made the average citizen aware of the abovementioned 5 toxic functions of bank currencies, from which they do not suffer. In the diagram below we see the increase of the transactions in digital currencies even if transactions are currently made, mainly, with bank currencies rather than crypto-currencies.

Percentage of population that makes buyments online (2011-2017) — Source: HSA



[20] Use of e-commerce. [21]

The next is a table that discover hidden believes about money as compared with the reality.

Table 3 Money

MONEY AND SOCIETY	
Major believes	**The reality**
1) Society cannot function without the current concept and function of money	**It is known by the theories of social systems in sociology, that money is necessary only when there is the private property whose value must measure, and that social systems without private property do not need money to function. Nevertheless**

	Money is not a single concept and function and there a lot of different types of money relative to its effect in the society and the inequalities. As in the civilization, due to lower frequency and level of evolution or development, there is an excess of negative will within the symbolic duality of prey-predator , then the way to mix it and convert it to will for good , is through private property and enterprise and the completion of productivity and power through capital accumulation ,as in the private sector. Large enterprises with size above the median contribute usually to the increase of economic inequalities. Their products reflect the rather negative will of power accumulation through money, in their designed programmed obsolescence for reasons of money. Small size of enterprises on the other hand contribute to the decrease of the economic inequalities and the main concern of their owners , besides offering with their products or services, is to survive or keep a decent level of well-being. It is a challenge to re-design the function of money so that it reduces inequalities and grants also the basic income to the citizens.
2) Economic inequalities reflect the meritocracy among people.	**This is partially only true. The economic inequalities reflect the meritocracy of special type of skill, that of becoming rich. In the great picture of society, money is the main tool for creating in a statistical way inequalities. And the inequalities are also source of injustice and unfairness in the fate of human beings that may be more advanced souls that those with the privilege of being rich. The initiators of many religions is an example. Or many heroic figures in sciences and arts, that have advanced the civilization but they did not acquire neither sufficient money neither sufficient fame when they were living. These are not merely the exceptions in statistical rule, as money has a statistical property similar to the inherited royal aristocracy in this sense that in order to get the privilege of becoming rich one must adopt and repeat the same type of strategies under similar principles and values as the already rich did to become rich (Skill to become rich) .**
3) The economy cannot function without the current banking-monetary system of money supply after issuing it, exclusively through lending.	**3) The emergence of the <u>digital (crypto) currencies</u> seem to suggest that in a few decades they will make the banking system (which is responsible for the repeating debt crises) almost obsolete, as Monarchies and Aristocracy became in politics. If national currencies will remain, they should be issued from public <u>not-for profit organizations that should circulate the issued money mainly not through debt</u>.**

4) Money is neutral in creating inequalities in societies.	**4) Money is not only a neutral tool as means of exchange. Its statistical function is also a tool to create the economic inequalities, and has become a tool to exercise non-democratic power from small minority groups to the majority**
2) Money is a positive tool in the social functioning	**5) Money is good only as lesser semi-random evil, compared to direct brutal military or monarchic based, totalitarianism, in creating inequalities based on direct force by weapons or based on racist principles.**

In the next we present principles and rules for general local or global digital currencies with or without the block chain technology that can solve the great indirect evil in our civilization which is large percentages of poverty. <u>This poverty is not due to lack of good and resources but mainly a systemic crime based on the distribution and circulation of the money without a free basic income.</u> A planet like earth can comfortably support up to 10 billion people if the right to access the goods (money) is appropriately distributed (free basic income) . We are at the moment a bit more than 7,5 billion people. This poverty can be eliminated through the free basic income , which unfortunately cannot come entirely from the taxes as it us a too large expense , but only directly through the money issuing,

We describe general new principles t design new types of healthy money and present rules how such local currencies that provide a free basic income can function within the old forms of banking currency.

<u>The next rules and principles for local digital currencies are variations and synthesis of similar rules of the local currency of Woergle in Austria in the decade of 1930, and of the modern Sardex local currency in Italy. (see</u> [8]***<u>)</u>***

The rules lead also to a parallel local currency to that of the dominant (US dollar or Euro etc) which is not inflation based **<u>, it includes the basic income</u>** and all the taxes are paid in full to the dominant currency (US dollar or Euro etc)
Let us put some terminology to ease the discussion Let us consider 2 properties of money

1) Unit of measurement of value of other goods (This aspect of money does not require the existence of private property in the social system)
2) Store of value (This aspect of money is usually linked with the existence of private property in the social system)

If both hold for a currency let us call it **1^{st} generation money** , while if only the 1^{st} property holds and not the second let us call it **2^{nd} generation money**. 1st generation money can be bought and sold and borrowed with interest, but 2^{nd} generation money cannot (it has no interest rate too).

Also for the 1st generation money if in order to issue it one requires collateral (to be backed up with e.g. gold or a basket of goods and services) let us call it **collateral based money**, while if it is possible to issue it without corresponding to an already existing good **zero-generated money or currency**. For example the current banking money is zero-generated money.
Obviously the bitcoin is not 2nd generation money and zero-generated , while complementary credit currencies like Sardex is 2nd generation money but also collateral money. Also the internet currency gradido (by Bernd Huckstadt, http://gradido.net/en/Book/c/1/book) is 1st generation money too but also zero-generated.
Now what are the desired experience for money that we would like so as to improve social life and the existential experience of it? In my psychology and perception the next would be the desired properties
1) We want money that frees from financial slavery (e.g. minimum free basic income).
2) We want money that everybody can issue and is not the privilege to few only
3) We want money that provides capital (equity not debt) to anyone who want to make a growing business
4) We want money that is not tied directly to private property , as few only have sufficient large private property
5) We want money that its rules allow the decrease of private property inequalities.
6) We want money that is closer to the functions of the free flowing information of the web, rather than money tied to static private property.
Therefore under these desired properties , we should favour
1) **2nd generation money** versus **1st generation money**
2) And from 1st generation money , the **zero-generated** versus **the collateral based money**.

We do live in a world of 1st generation and zero-generated money, which is more intangible, than the collateral money which is more hard materialistic. I believe we should no go back to collateral money. People trading in stock exchanges (when they do not lose massively money) experience the idea of making money from nothing. Although this may seem and may be parasitic, we can convert this feeling to something fruitful for the productive economics. We should take the zero-generated money and transform it or the sake of liberating financial the majority and reducing economic inequalities. It seems to me more spiritual, more charming and with more degrees of freedom to define what we want with money.

GENERAL PRINCIPLES OF LOCAL OR GLOBAL OR DIGITAL CURRENCIES

(The principles are desired , but not all principles are realized by the rules)

1. Principle of democratic equality

Whenever new currency is issued, it belongs to the collective equally to all. All members are equal with respect to the rules of the currency. The value of the currency corresponds to the productive and wealth creating ability of the people as individuals and collectively. Every situation and intention for productivity by a person or group of persons that will be good for the collective, and if the lupper limit of percentage of money to the non-money wealth of the society is nor surpassed, is a good reason for issuing of money to create more than 80% equity capital (and not borrowed liability capital) to support the productivity.

2. Principle of consistent inheritance of the civilization to all

Every person has the birth right till the end of his life to basic goods and services for good survival. This is done through the minimal subsidy or free basic income of survival, which defines a non-zero-sum periodic residual for every person

3. Principle of non-proprietary money (2nd generation money) and proprietary money (1st generation money)

The 2nd generation money is only abstract units of measurement of economic subjective value , therefore it cannot be property of anyone. Currency cannot be bought sold, lent , or borrowed, on an interest rate. Instead of owning amounts of currency, there is the almost equivalent concept of temporary credit from the collective to any member of the collective , for any goods and services that the collective can provide, measured in units of economic value. If the local central authority itself owns such “money” units, then it means that it is inversely a temporary credit from the members of the collective to the collective, for goods and services that the collective can provide, measured in units of economic value. The value of the currency corresponds to the productive and wealth creating ability of the people as atoms and collectively. 1st generation money has the properties 1) portable for purposes of means of exchange and transactions 2) Its units of value that measure the value of goods 3) It is the store of value. But 2nd generation of money has the properties 1) 2) but not 3) as it is not store of value. Therefore, here we are taking about 2nd generation money.
Modern 1st generation money that are also store of value, most probably should be a fixed basket of goods and services. E.g. the unit could be a basket of goods and services that an average person needs for a decent life during one month. Non-proprietary money (2nd generation) can be converted to proprietary 1st generation money according to in advance decided and agreed rules.

4. Principle about the amount of currency

The amount of existing currency at each time is related in a monotone increasing way to the a) size of the population b) volume of activities c) Volume of tangible wealth or assets, locally produced or imported.
For small collectives, that the accounting and evaluation of the assets is difficult the dependence of the amount of currency on the 3rd factor of assets is not used.
The rules are such that for constant population, volumes of activity and tangible wealth, the amount of currency is asymptotically constant (so no inflation is created by the rules of the currency itself). For example, if only the c) factor of the volume of tangible wealth or assets, a suggested of corresponding size of money amount would be 66% (=2/3). This is as percentage about the percentage of water in the biomass.

5. Principle of reduction of inequalities

The collective network puts rules of the currency , so as to reduce in a consistent way the financial inequalities.
(The principles are desired , but not all principles are realized by the rules of the currency)

6.1 Principle of the central local authority (case of public authority issuing the currency)

The collective network has privilege as far as issuing, and distribution of the currency compared to the members, only so as to serve the totality of the members and the environment.

6.2 Principle of non-central authority. (case of private enterprise issuing the currency)

The administrators of the collective network have no privilege as far as issuing, and distribution of the currency compared to the members.

7. Principle of non-debt society.
The issued currency is circulating from the issuing agency to the collective mainly (e.g. suggested at least by 4/5) with other ways than debt.

8. Principle of economic autonomy
The rules are such that the collective can sustain itself economically for an indefinitely time under normal conditions. This means that exports and imports both for tangible goods and intangible services are not non-balancing in systematic way in such amounts that supersede the ability of payments by the collective.

LOCAL (CITY) GOVERNMENT CURRENCY WITHIN THE OLD BANKING CURRENCY

RULES OF THE NETWORK

The members of the local currency can be physical persons, enterprises and the local city government itself.

The percentages x% , y% , z% , 1% reduction monthly etc are universal constants and parameters of the local currency.

1. Rules of issuing and distribution of the currency (Population , assets and volume of activities

1.1 Every month the local (city) government is issuing and is giving a constant amount per each person-member of the network as survival subside(e.g. 1000 equivalent to euro). The issued currency has a date of birth in the computer system. This covers the principle 2 , and that the amount of circulating currency depends only on the number of individuals in the population as backed-up by the intangible assets of productivity of the individuals of the population. Alternatively it depends both on the number of individuals in the population plus as percentage of the value of the total assets-wealth of the population both tangible in t% and intangible in i% and also as percentage of the volume of productive activities (local group GDP) p% . It also covers the principle 5 of reduction of inequalities.

1.2 But at the same time, when 1.1 is applied the local government is issuing 2 times the same amount for each member, so that half of it serves as the taxes, corresponding to that person, and the other half, for the ecological environment and foreign (to the collective) transactions with other collectives. We notice here that although there is “taxation” for persons there is no for organizations. As economic organizations reflect also economic inequalities, this means the local government does not have advantage in the taxes by higher economic inequalities.

1.3 At each indented transaction between two members of the local currency, x% (e.g. 10 %, but it maybe agreed to be 100% also) of its value is done in the local electronic currency (possibly after issuing automatically by the local government the necessary local currency), for the buying side, which is received by the selling side. The issued currency has a date of birth in the computer system.

1.4 For small collectives of local currency the dependence of the issued currency on the existing wealth does not apply, for reasons of non-available information and the principle 5. But if it does apply, then there is a one time initial issuing and granting of an amount of local currency at the subscription of the member in the local currency proportional to the size of its assets with a coefficient equal for all members.

2. Rules of currency withdrawal from circulation for asymptotic constant amount of currency

2.1. Any amount of local currency as a kind of automatic tax that does no go to anyone though not even to the local government , or withdrawal from circulation, decreases its value, by 1% monthly (in general y% monthly) , and in general proportionally in time with the above rate , according to its date of birth. The 1% is set so the annual rate of decrease is close to the rate of a low taxation, thus familiar. Otherwise higher rates, would make the local currency undesirable to store economic value compared to the old banking currency (e.g. Euro). Furthermore this rule of simple proportionality can be improved (relative to the principle 5) to be with an increasing percentage to the size of the amount of currency according to an agreed table exactly as it is down in the taxation in the current banking currency (e.g., euro) This rule of depletion of the value of the currency are set so as to have asymptotically constant

amount of circulating currency relative to population, and thus no inflation due to the issuing of new currency.
Alternatively to this rule is that the currency does not lose money by time, but at the death of a person all the currency that he/she poses is annihilated. Again for constant population and length of life, this creates a constant amount of currency which therefore is not inflationary.

2.2. Alternatively to 2.1, at each transaction, as a kind of automatic tax that does no go to anyone though, there is a subtraction of the part of the value, of the transaction in the local currency by 12% . which is charged equally as 6% to the buying and selling sides. Furthermore this rule of simple proportionality can be improved (relative to the principle 5) to be with an increasing percentage to the size of the amount of currency according to an agreed table exactly as it is down in the taxation in the current banking currency (e.g., euro This rule of withdrawal of currency from circulation is set so as to have asymptotically constant amount of circulating currency relative to the volume of activities, and thus no inflation due to the issuing of new currency.

2.3 Receipts and other accounting documents are produced for every transaction as if it was carried out in full value in the old banking currency. National taxes are paid also in full in the old banking currency, by both sides.

3. Rules of authority responsibilities and economics

3.1 The local (city) that runs the network of the local currency through the internet, acts as a not-for-profit organization. The accumulated funds in the local currency , by the "taxation" (rule 1.2) are utilized exclusively for the common good, of the collective, and only after appropriate direct-democratic voting (through the internet) and financial auditing, of the members to the administrators of the local (city) government.

4. Rules of correlation of the local currency with the old banking currency.

4.0 The cross exchange rate of the local electronic currency to the parallel global banking currency (e.g. euro) is determined either in a semi-fixed rate adjusted by a political decision after a voting of all members of the network, or it is left free-floating defined daily by the free market of exchanges.

4.1 Any person, enterprise, or other organization that becomes a member of the local currency is committed to provide at least z% (e.g. 10% as in Sardex) of its sales, if there is demand for it, by other members of the local currency, to be carried out in the local currency. This includes both tangible goods and intangible services and salaries (as long as both the organization and the employee are members of the local currency).

4.2 Any transaction between two members of the local currency must be done in at least x% of its total value, in the local currency (e.g. 10% or 100%) . But there is a veto option for the member-buyer to have it 100% in the local currency. This veto option of the buyer cannot override the veto option too of the seller not to make available more than z% (e.g. 10% as in Sardex) of its sales in the local non-banking currency.

5. Rules of economic autonomy
The details of the rules so as to have economic autonomy as in the principle 8, are left open.

PRIVATE ENTERPRISE LOCAL CURRENCY WITHIN THE OLD BANKING CURRENCY.

RULES OF THE NETWORK
The members of the local currency can be physical persons, enterprises or the local city government itself. The percentages x% , y% (or 1% reduction monthly), z% , etc are universal constants and parameters of the local currency.

1. Rules of issuing of the currency and distribution (Population , assets and volume of activities)

1.1 Every month the network is issuing and is giving a constant amount per each person-member of the network as survival subside (e.g. 1000 equivalent to euro). The issued currency has a date of birth in the computer system. This covers the principle 2 , and that the amount of circulating currency depends only on the number of individuals in the population as backed-up by the intangible assets of productivity of the individuals of the population. Alternatively it depends both on the number of individuals in the population plus as percentage of the value of the total assets-wealth of the population both tangible in t% and intangible in i% and also as percentage of the volume of productive activities (local group GDP) p% . It also covers the principle 5 of reduction of inequalities.

1.2 At each indented transaction between two members of the local currency, x% (e.g. 10% or even 100%) of its value is done through the electronic local currency (possibly after issuing the necessary local currency), for the buying side, which is received by the selling side. The issued currency has a date of birth in the computer system.

1.3 For small collectives of local currency the dependence of the issued currency on the existing wealth does not apply, for reasons of non-available information and the principle 5.

2. Rules of taxation or currency withdrawal from circulation for asymptotic constant amount of currency

2.1. Any amount of local currency as a kind of automatic tax that does no go to anyone though, or withdrawal from circulation, decreases its value, by 1% monthly (in general y% monthly) , and in general proportionally in time with the above rate , according to its date of birth. The 1% is set so at the annual rate of decrease is close to the rate of a low taxation, thus familiar. Otherwise higher rates, would make the local currency undesirable to store economic value compared to the old banking currency (e.g. Euro). Furthermore this rule of simple proportionality can be improved (relative to the principle 5) to be with an increasing percentage to the size of the amount of currency according to an agreed table exactly as it is down in the taxation in the current banking currency (e.g., euro) This rule of depletion of the value of the currency is set so as to have asymptotically constant amount of circulating currency relative to population, and thus no inflation due to the issuing of new currency. *Alternatively to this rule is that the currency does not lose money by time, but at the death of a person all the currency that he/she poses is annihilated. Again for constant population and length of life, this creates a constant amount of currency which therefore is not inflationary.*

2.2. Alternatively to 2.1, at each transaction, as a kind of automatic tax that does no go to anyone though, there is a subtraction of the value, of the transaction in the local currency by 12% . which is charged equally as 6% to the buying and selling sides. Furthermore this rule of simple proportionality can be improved (relative to the principle 5) to be with an increasing percentage to the size of the amount of currency according to an agreed table exactly as it is down in the taxation in the current banking currency (e.g., euro) This rule of withdrawal of currency from circulation is set so as to have asymptotically constant amount of circulating currency relative to the volume of activities, and thus no inflation due to the issuing of new currency.

2.3 Receipts and other accounting documents are produced for every transaction as if it was carried out in full value in the old banking currency. National taxes are paid also in full in the old banking currency, by both sides.

3. Rules of network administration reward

3.1 The private enterprise that runs the network of the local currency through the internet, should be preferably but not necessarily a not-for-profit organization. The covering of the costs of this organization is through monthly fees, that are z% (e.g. 10%) in the local currency and 100%-z% in the old banking currency (e.g. euro). The organization that coordinates the local currency has the same rights and privileges as any other member organization of the local currency.

4. Rules of correlation of the local currency with the old banking currency.

4.0 The cross exchange rate of the local electronic currency to the parallel global banking currency (e.g. euro) is determined either in a semi-fixed rate adjusted by a political decision after a voting of all members of the network, or it is left free-floating defined daily by the free market of exchanges.

4.1 Any person, enterprise, or other organization that becomes a member of the local currency is committed to provide at least z% (e.g. as in Sardex 10%) of its sales, if there is demand for it by other members of the local currency, to be carried out in the local currency. This includes both tangible goods and intangible services and salaries (as long as both the organization and the employee are members of the local currency).

4.2 Any transaction between two members of the local currency must be done in at least x % (e.g. 10% but also maybe 100%) of its total value, in the local currency. But there is a veto option for the buyer to have it 100% in the local currency. This veto option of the buyer cannot override the veto option too of the seller not to make available more than z% (e.g. 10% as in the local currency of Sardex) of its sales in the local non-banking currency.

5. Rules of economic autonomy

The details of the rules so as to have economic autonomy as in the principle 8, are left open.

4. Conclusions

We summarize the conclusions of this article's analysis in a short list of 4 points

1) The exercise of substantial constructive justice and ethics in the financial decision making should be based on the principles of evolution of the soul consciousness and collective social good of the majority and not on the interests of a privileged financial oligarchy against the many. Otherwise, it is an exercise of destructive, short-sighted, bureaucratic regressive justice and economy.
2) Poverty is the main system evil of our economy and it can be cured through the free basic income. But unfortunately the free basic income cannot be derived solely from taxes, as it is a too large expense. It has to come directly from the money issuing organization.
3) We discover 5 toxic anti-democratic functions of the banking monetary system that create periodically debt crises. These functions originate during the gold standard an as the gold standard has been abandoned, so we can also correct them through top-down democratization of the banking monetary system. In this way poverty can also be eliminated as the free basic income can be derived now directly from money issuing.
4) Alternatively, the poverty may be eliminated with the free basic income through bottom-up alternative decentralized non-banking digital local or global currencies. We state the necessary principles for such currencies (governmental or not) and we give 2 examples of designs of them which are fully taxed within the old banking currencies.

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