Economocracy vs Capitalism

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Abstract

This work is an analysis of the Economocracy and Representative Economocracy. A reformed economic system is required for the transformation of global grown debt to sustainable levels. The challenge to avoid economic worldwide deadlock yields the emerging need for economocracy as a premium democracy, serving with that way social stability. The economic system of Economocracy is based on the free market but simultaneously faces all disturbances from wars, depressions, economic crises, and interest rates. Economocracy is the proportional system of Democracy in a political view, in the case of the economy. It is the only economic system that supports pure Democracy and can face global dept, healthcare problems, third world poverty, appropriate space programs, and any economic dysfunction which be an obstacle to pure democracy. This is the first peer-review publication of Economocracy after seven years of birth of Economocracy by working papers. This paper aims to clarify that capitalism has fundamental problems in many aspects. Primarily it is not plausible to regime any dysfunction of the local economies and in general at a worldwide level. Well-standing democracy cannot exist without economocracy, meaning that the control of the economy from the people and for the people, is the balanced way for economic affairs and then democracy. The interest rates and the global debt it is not plausible to be served by capitalism. The Economocracy is formed on the aspect of an economic unit globally that will control the global economic uncontrolled problems. Capitalism just moving the economic obligations or the future by depressing countries, and generations of people, and as result, it is to have wars, not pure democracies, and unlimited exploitation of the planet's resources without barriers, for profits. Also, economocracy can protect democracy from authoritarianism, as countries that do not comply with the aspects of Economocracy and democracy will not receive the "free amounts" of money for the enforcement of lower income, for medical care system, and other purposes. The purpose of the papers is to show is to present this economic system, using theoretical and mathematical terms and analysis. For this reason, is used a hypothetical scenario, but with real amounts, showing how will function Economocracy. The results comply with the initial hypothesis that global debt and interest rates could be covered by economocracy without causing inflation, in fact with way could be faced inflation from a plausible increase in prices, as this amount of money going for special purposes and don't affect the banking system, the market, the level of prices or in the general economy.

Keywords: economocracy, democracy, political aspects, global growth model, free of charge money, debt

JEL classification: A10, E00, F01, H10, H11

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1. Introduction

According to Democracy, based on Council of Europe:

The ancient Greeks are credited with creating the very first democracy, although there were almost certainly earlier examples of primitive democracy in other parts of the world. The Greek model was established in the 5th century BC, in the city of Athens. Among a sea of autocracies and oligarchies – which were the normal forms of government at the time – Athenian democracy stood out.

However, compared to how we understand democracy today, the Athenian model had two important differences:

- 1. Theirs was a form of direct democracy in other words, instead of electing representatives to govern on the people's behalf, "the people" themselves met, discussed questions of government, and then implemented policy.
- 2. Such a system was possible partly because "the people" was a very limited category. Those who could participate directly were a small part of the population, since women, slaves, aliens and of course, children were excluded. The numbers who participated were still far more than in a modern democracy: perhaps 50,000 males engaged directly in politics, out of a population of around 300,000 people.
- [...] Today there are as many different forms of democracy as there are democratic nations in the world. No two systems are the same and no one system can be taken as a "model". There are presidential and parliamentary democracies, democracies that are federal or unitary, democracies that use a proportional voting system, ones that use a majoritarian system, democracies that are also monarchies, and so on.

One thing that unites modern systems of democracy, and which also distinguishes them from the ancient model, is the use of representatives of the people. Instead of taking part directly in law-making, modern democracies use elections to select representatives who are sent by the people to govern on their behalf. Such a system is known as representative democracy. It can lay some claim to being "democratic" because it is, at least to some degree, based on the two principles above: equality of all (one person – one vote), and the right of every individual to some degree of personal autonomy". Even for the prisoners: "The United Kingdom in 2005, the European Court found that the universal ban on prisoners from voting in the UK was a violation of Article 3, Protocol 1 of the European Convention, which says that: "The High Contracting Parties undertake to hold free elections at reasonable intervals by secret ballot, under conditions which will ensure the free expression of the opinion of the people in the choice of the legislature (Council of Europe, 2022).

In the case of Capitalism, according to Britannica:

Although the continuous development of capitalism as a system dates only from the 16th century, antecedents of capitalist institutions existed in the ancient world, and flourishing pockets of capitalism were present in Europe during the later Middle Ages. The development of capitalism was spearheaded by the growth of the English cloth industry during the 16th, 17th, and 18th centuries. The feature of this development that distinguished capitalism from previous systems was the use of accumulated capital to enlarge productive capacity rather than to invest in economically unproductive enterprises, such as pyramids and cathedrals. This characteristic was encouraged by several historical events. [...] In the decades immediately following World War II, the economies of the major capitalist countries, all of which had adopted some version of the welfare state, performed well, restoring some of the confidence in the capitalist system that had been lost in the 1930s. Beginning in the 1970s, however, rapid increases in economic

inequality (*see* income inequality; distribution of wealth and income), both internationally and within individual countries, revived doubts among some people about the long-term viability of the system. Following the financial crisis of 2007–09 and the Great Recession that accompanied it, there was renewed interest in socialism among many people in the United States, especially millennials (persons born in the 1980s or '90s), a group that had been particularly hard-hit by the recession (Britannica, 2022).

Therefore, Capitalism is not associated in any sense with democratic values and of course with the entering term of economocratic values, therefore it is out of law and philosophical aspects of history, as does not correlate with any other issues of the society. In addition, it is not affiliated with any positive non – productive money, there comes the need and in a stricto sensu economic approach the need for the Economocracy. It is natural for the negative non – productive money (e.g. interest rates), to be faced with positive non – productive money, and globalization concerning the nations it is able, through democratic and economocratic principles.

However, democracy is not plausible to be established appropriately in most countries as pressure on the citizens by authoritarianism in many cases is mentioned, and most times for economic reasons. Also, wars cause a collapse of countries, and the only way to cover these damages in a reasonable time is by economocracy. Economocracy has the economic power to serve the democratic principles, as seems that democracy is the ideal world and economocracy is the real world, the combination of them serves the economocratic and democratic principles of equality and free political choice. Economocracy is the best political tool to face countries with authoritarianism as these countries (the clarification of them should comply with: science, public opinion, national and international authorities/organizations, etc) if they are not come to compromise with the democratic world, could avoided from the Economocracy system and will not have economic support by the free charge of the money of Economocracy. In that way, Democracy and Economocracy will be a global matter for all countries, as the human principles and the economocratic principles will be primarily humanitarian.

Capitalism can't face any disturbance of the economy democratically, something that can be done by principles of the Economocracy, the sister of Democracy in the field of economics. Pure democracy is not plausible to be established without facing a regime of the economic situation. Capitalism doesn't support the independence of the free will of democratic principles, which can be done only by Economocracy. The main concept of Economocracy means as I have defined economy and control or state, from the Greek world οικονομία plus κράτος, giving Οικονομοκρατία (Economocracy). This world doesn't exist in the Greek language, expressing that meaning, but I have defined it that way, according to the prior concept.

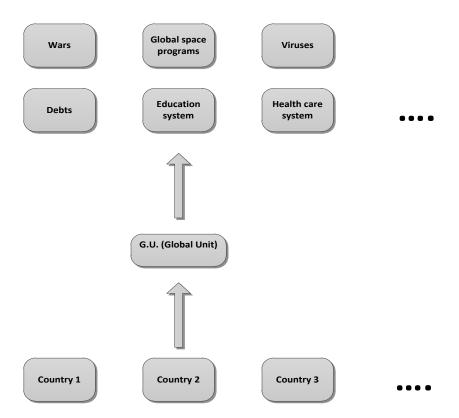
The economic system of Economocracy faces non-productive money, as in the case of interest rates. The Economocracy is the healing of the interest rates and debts. Both, of them, are based on productive money, meaning the money that comes without any real exchange and is over the case of work (The World Bank, 2017). But the Economocracy is fair as it uses the GDPs, and therefore uses productive money, meaning the money which comes from work and services (Challoumis, 2017).

Economocracy protects Democracy, as it allows Democracy to work independently from the struggle of Deficits. Also, can have an easy transition from Capitalism to Economocracy, as an easy establishment. The main thing that should happen is an agreement between Nations, to create a Global Unit of Economic Affairs, the center of Economocracy. This means that all the countries should agree to have an economic center that gives money proportionally and evaluated by the GDPs, and this money is free of charge (this is the role of agreement, as the

same happens for interests), to cover debts, viruses (like today coronavirus and in the future other viruses), education, health programs, and space programs (Challoumis, 2015).

In addition, it is not plausible to be called civilized and kill animals for food, at some point time humanity must create meat in all flavors without killing animals, without causing health dysfunctions, and the procedure should be public and be checked by any citizen by online cameras or by inspection at any point of time. In that way, hunger could be faced and on the other hand simultaneously some precautions could be held for general aspects e.g control of population pending on the exploitation of resources of the planet or special units must make investigations about planet's remaining resources. Animal hospitals should be created and must be covered by this amount of money. This money could also support private organizations, but only for the public interest. For instance, in the U.S. the healthcare system for many people could be covered by this amount of money and by the private sector. Or private space programs, but for the public purpose could be supported by this amount of money, etc. Moreover, countries that do not support democracy, or cause wars can be controlled by Economocracy to change their attitude to comply with democratic principles.

Fig. 1 Economocracy's mechanism (author's scheme)



Economocracy is for the economy the same thing that Democracy is for policy. Democracy has dysfunctions in combination with Capitalism, as Capitalism doesn't' has that control of economic affairs and disturbances. Democracy is the sister of Economocracy, as they have the main root and the main concept. Moreover, accordingly, Economocracy and Democracy officially are globalized and through them, the countries have a connected form, of aspects and systems.

2. Literature Review

This issue presented a theme of the global economic growth model. The case of debts worldwide seems not to be arranged effectively. This is obvious in the general case of worldwide debt which is growing through time and no effective solution seems to come up. The basic idea is that the existing structure of the global economic system appears to be without any reflections. There is an exception, and this exception is the case that the increasing tax rates achieve to face temporarily the issue of debts. The argument here is that following this orientation probably in the short term it is possible to face the emerging obligations which debts cause. But, simultaneously the lack of money makes the situation more difficult because it is hardest to face the increasing debts in long-term conditions. The reason is that the sustainability of debts becomes more and more unaffordable. It seems that the solutions of models which pending only on local economic solutions are not so effective. This is the cause why a global economic growth model seems to have better results (Barro & Sala-i-Martin, 1995). Otherwise, the growth of debts will continue to be perpetual, and unlimited. The need for a different economic system is obvious, otherwise seems to be no exit from economic crises(Leigh, Pescatori, & Guajardo, 2011). The existing financial system has consequences for economies. Countries worldwide are trying to face increasing interest rates. Interest rates are critical in the growth of debts. This is the argument for why a reform of the economic system should happen. There must be a change in the form of economocracy. Economocracy is a reformed economic system that faces the issue of debts combining financial and productive aspects. The key idea behind this theory is that a proportional subtraction should happen in each country according to its GDP. The critical point is that this is affordable in financial terms. The simultaneous proportional subtraction of each country's debt allows for keeping the currency and fluctuation rates at sustainable levels. This means that by stabilizing the currency rates and the fluctuation to the same level as those had before the change that authorities cause; it can financially face debts. The authorities possibly could be the G20, or G7, or in other cases a new agency about this subject. Economocracy is fully compatible with the rules and the aspects of democracy. This means that the tax rates after the change in any country could be kept at more sustainable levels. Because of the decline in debts, then the decrease in taxes is anticipated by the citizens and the authorities of each country.

Based on that, it is expected that the basic principles of democracy in any country will be preserved at good levels. This stands on the thought that more capital will be invested for social purposes. Social purposes could be served, like the health sectors and the educational sectors of each country. Then there is obtained a brotherhood between the two systems. One system supports the other. This means that an economic system stands for a political system. The connection between the debts, the GDPs, and the fundamental principles of democracy is determined in this way. The thing is that this global growth model is not based only on financial solutions. I mean that there exists a real economy. The real economy is centralized in the GDP. The GDP is a result of the economic growth of each country by its domestic product. The issue is that this global growth model used the GDP which shows that there the real economy is connected with the financial aspects. This is very important because the amount of debt that is decreased by each country is proportional to the amount of GDP. This means that the countries would have more than one reason to have a higher GDP. Countries with high GDP will have double benefits. First, all will have a higher debt decline, and second will have a motive to keep their GDP to a sustainable level, and in the same time the countries that have weaker economies, will keep their economies and will be able to fix their structural problems without a lot of pressure by their loaners. The financial loaners will receive their money and will have a lower risk of their investments. No inflation could be as this money are target purpose money, meaning that our money going not directly to the market, but for the loans that would be paid.

For instance, many governments with energy crises, with economic support declined the cost of energy, facing inflation, as the prices didn't go higher. The mechanism and the agreements between the nations secure this process. So, we conclude that the economic system of economocracy combines both the financial and the real economic aspects.

This combination of financial and real economic aspects under the supervision of the authorities could offer benefits to all the parts which are associated with this system. Also, it must be mentioned that this money that would be used from countries, is not a bureau to them as they are uncharged money. The term uncharged money is the key element behind this theory as the proportional liquidity for the decline of each debt will be produced by each country, but no obligation will be caused to them, setting this money free of charge. It is plausible to happen if the liquidity comes up at the same time for all the countries. The reason is that no fluctuations could happen, and no unbalance between currency rates could appear. The reason is that this money will not go to the market, but to the loans. Here must be mentioned the term free of charge money. The free charge of money is a produced liquidity produced according to the GDP of each country. Then a free charge of money could be applied if this liquidity is under the conditions of economocracy. So to serve this scope the next sections analyzed issues like the theme of the European Union convergence, with its fiscal policy, the aspect of austerity, the economic productive reset, and the economic periodic injections, with their mathematical scrutiny, to show how the economic system of economocracy functions. In summarizing there are some key points of this economic system:

- Economocracy aims to face the debt of each country accordingly and to extend the global debt.
- The mechanism of economocracy is based on the GDP of each country.
- Through the control of the economies by economocracy is plausible to administrate issues of public deficits, tax rates, bank loans, and market sustainability.
- The high tax rates to taxpayers are plausible to be diminished.
- In all countries, the deficit could be administrated to sustainable levels accordingly to the GDP rate of each country.
- Social structures according to the deposits of each country could be enforced by the application of economocracy.

3. Methodology

Also, the methodology that is followed is formed on the confirmation of the hypothesis using mathematical prototyping, moreover, is used the NPL method of Karush-Kuhn-Tucker and the analysis of a regression approach for the unit root tests. Then, the main problem which economocracy faces is the debt that each country has, and in aggregate the global debt. The base of the reduction of debts is the GDP level of each country. Therefore, with the application of economocracy, the markets and the banks will receive their money from existing loans. This will be allowed the economies to reduce the tax rates of the taxpayers, and the banks will have less economic pressure, without these debts. Moreover, the social structures could be enforced in all countries as their economies would be more sustainable levels and public sectors could have deposits.

4. Economocracy

The economic system of economocracy must be defined as the relative of democracy and the crucial guarantee for their existence is the brotherhood that connects them. The bond between economocracy and democracy affects the liquidity and leads to curing the debt effects on society; eliminating the omissions that the law sector and economy have as a result when functioning individually. Their unity diminishes the impacts that the divergence of their

function causes. The science of law is not allowed to serve some of the fundamental principles of status negativus (personal rights), status positivus (social rights), and status activus (political rights), when acting solely in any economic system. For instance, the case of property and assets in the current economic situation causes paranormal effects in legal aspects.

The same social conditions for all citizens are not allowed. The lack of basic infrastructures in many countries is a fact. The debt is transferred to the descendants of each country without any minimum chance for them to be protected by basic rights. This economic deadlock is plausible to be solved with the cooperation of economocracy and democracy together. That situation caused by economic and law dysfunctions can be solved by the introduction of economocracy as an economic system associated with democracy. Moreover, economocracy is a reformed economic system that faces permanently the issues that global debt causes in the whole economy. Besides, economocracy supports the stability of all economies, and the reason is that offers reliability to the financial sector, as the risk is declined in the economic system of economocracy. Additionally, all countries can develop their crucial economic structures, effectively, without the pressure of the high tax pay rate. The decline of tax rates is possible under these economic circumstances, where obligations to the loaners are demised. Then is more affordable to make more private and public investments easier. The whole economic scheme is completely different than the existing one. The issue that economocracy protects democracy is crucial for social stability, having an impact on the basic principles of law. Then it is concluded that the positive effects of this reformed economic system are a lot, as influences many sectors such as the economy, and political, social, and legal issues. All these influences have their base in the lack of economic obligations to the loaners.

The pressures of tax have an important impact on consumption and private investments. The same happens to public investments. It is obvious that the temporary solutions that tax offers, are not without consequences. Maybe, in short-term conditions countries achieve to face temporarily their obligations, but in long-term conditions, there are negative aspects for the economies. As the lack of liquidity that tax causes, affects the future administration of public debts. This is the reason why an economic deadlock is obvious. Considering an index that the last twenty years the global debt is permanently increasing seems like a perpetual growth of debt will happen. There is not any effective mechanism to handle these aspects. Economocracy, suggests a different view of the global economic structure. The economies are in interaction, so the solutions must be not individuals. They could be individual but not on a permanent base, as the economic conditions of each country are not contaminated. The economic circumstances of each country influence the other economies. Economies are not isolated; this means that also the GDP of each country is in connection with the other economies. The reformed economic system of economocracy includes these aspects in its mechanism, as it uses economic terms that are globalized, meaning that takes care of an overall view of the global economy. Terms like free-of-charge money are not plausible to be applied as there is not a simultaneous decline in debts world widely. In a globalized economy, these things must be taken into consideration. The existing condition of basically isolated solutions to economies, which are in interaction, is the main reason why the global debt seems to have a perpetual increase. The interactions between the GDPs and the debts of the economies must be included in a global growth model. In any case, international economic factors must be estimated in the examination of the debts. Then, a global debt approach is needed to face these issues, otherwise, the perpetual debt will have aspects and to democracy. A lot of times is not plausible to serve basic principles under economies that don't have sustainable economic conditions (Mankiw, Romer, & Weil, 1992). In any sense economocracy is an economic system that serves the principles of democracy, giving permanent solutions to the increasing global debt. This is the reason why economocracy and democracy are in a brotherhood because they have the same philosophy and orientation.

5. European Union and GDP of the Economics

The European Union operates with a unified monetary policy but is contemporary with a dispersion of economic policies, deriving from different trajectories of fiscal policies. These conditions are the main elements of divergence that cannot lead to an economic balance. The prospects of stability without the appropriate convergence of fiscal and monetary policy will lead to permanent austerity and will be impossible to have because of a united and uniformed union, diminishing with that way economic stability. As the currency rate is adequate for some economies, at the same time is not suitable for other weaker economies based on the view of their economic structure. The issue is that the divergence between the fiscal policies of the countries makes difficult the aspect of the convergence of their economies, pending that most of these countries have the same currency rate. This issue has an impact on these economies to have effective public policies to face their debts. It is not possible to have the same monetary policy, but a different fiscal policy and to expect to have the same result, in all cases. It is obvious that under these circumstances it is not plausible to face public debts in the same effective way. This means that the countries that have the same currency rates must have the same fiscal policies if they want to face the same effective way their increasing public debts. One more reason is that each country has a different GDP and different debt. This means that it is not possible to use the same monetary policy, but not the same fiscal policy and to expect to have the same results since each country has a different GDP, a different debt requirement, a different monetary, and a different fiscal policy by each country. Then, each country should have its own monetary and fiscal policy, or all the countries should have the same monetary and fiscal policy, to face the EU debt, as a unified debt. Otherwise, the GDP growth of some countries always will have arguments, and other countries will have some increase. But, under these conditions is not possible to retain a unified monetary policy and a stable EU economy.

Moreover, the loaners always will face high risk under these circumstances, with a possible loss of money. The decline of debts will permit to EU to apply the appropriate economic policies without any pressure from the economic conditions of each country. Also, economocracy is an economic system, which offers the economies with high GDPs, like the US, China, Nations facing War, Germany, UK, France, Italy, Japan, India, Canada, Brazil, Spain, etc. to have the chance to develop better their high quality social and economic structures. The same benefits have the intermediate and the weaker economies, but always respectively to the GDP of each country. That some countries have a higher decline in their debts doesn't mean that they have higher benefits, as in many cases there are higher debts, and simultaneously higher GDPs. Therefore, must be noted that the reduction of the debt of each country is proportional to the GDP, and is calculated by the same coefficient. This means that they have the chance to reform better their debts than other countries, as they have a greater decline in their debts. Moreover, the weaker economies will have the chance to make root reforms to their crucial economic structures, like the reform of their public sector, in a more effective form. No fluctuations will be, because this money belongs to the loaners, so are not money that will cause inflation, because it will not enter directly into the market. Moreover, since the chance of the decline of the debts happens contemporaneously and proportionally to each GPD, it doesn't affect the currency rates as no disturbance happens between them; keeping in mind that these countries' debt declines are proportional to their existing GDP rates (Lucas Jr., 1988). It is concluded that all countries which participate in the economic structure of economocracy secure better economic standards than in their previous conditions, and the same happens for the loaners (Ortiz, Burke, Berrada, & Cortes, 2013).

The most significant thing is the bonds between economocracy and democracy, as both of them function better under these circumstances. The concept of free-of-charge money is possible under this mechanism, otherwise is not possible for an application of free-of-charge money, because will affect the economy (Gool & Pearson, 2014). The criteria are confirmed in the economic system of economocracy, which is a global economic system, which functions interactively between countries. Under different conditions, and constraints it is not possible to apply things like the term free of charge money, the fair decline of debts, the no disturbance between the economies, in aspects such as inflation, the currency rate, etc.

6. Austerity and economic policy

The increasing debt of sovereign, powerful countries will lead to extending economic convolution with ramifications for other countries. Presumably, this economic environment of cumulative lack of payment from governments will lead to global instability without offering any permanent solution. Even with an optimistic view, the result of increasing debt will derive universal austerity for the social base for a long time. If the change in the economic system concerning democracy, does not apply, then the final effect of the whole economic system will have accumulative economic aspects. Also, if global debts don't set up, with an evolutionary economic system then the results will be disastrous. The economocracy and democracy must exist together as a premium of social and economic stability. One other issue is that lack of money causes difficulties to the economy because the increasing obligations or are public sector based on the loans affects seriously the liquidity. The decrease in liquidity in each country has an impact making it more and more difficult to face the growing debts. The theme of the increasing debts shows that a final global economic deadlock will be the result of the lack of public policies to handle effectively this issue. The increasing tax rates have a physical limit, as it is not always possible to face temporarily the theme of global debts. The reformed economic system of economocracy offers an effective solution to the argument of increasing debts. It is crucial to the fact that economocracy doesn't add any other bureau in the tax-payers. Contemporaneously, economocracy suggests a permanent solution, far away from the temporal solutions, of the local policies that countries apply in most cases.

A global application of the aspects of economocracy is possible by a commitment of G20, or G7, or by an authority that should be created to handle the issues of debts. Otherwise, the temporary solutions will continue to support the growth of aggregate debts. Also, the loaners in these situations will lose some of their investments. So, the risk of the loaners in these circumstances is extremely high, as the global debt continues that trajectory (Ciccarelli & Mojon, 2005). The thing is that economocracy supports the principles of democracy, and the reason is that an economocracy with high liquidity offers the chance to the local authorities to develop social structures that are basic for the political system of democracy, like the case of education, and the health care system. Moreover, the principles of personal rights, social rights, and political rights are served better in stable economic conditions, and not under the pressure of loans, otherwise, these rights are squeezed to their minimum form.

7. Economocracy and EPR with EPI

The transformation of the economic system requires the change of the economy into the form of economocracy (Romer, 1986). As democracy means that citizens have control of the township, economocracy supports the economy in that direction; otherwise, global indebtedness will lead to social volatility (Swarnali, Maximiliano, & Ruta, 2015). Economocracy guarantees the political rights of all citizens offering them the opportunity to have control over the economy.

7.1. E.P.R. (Economic Productive Reset)

The basic substance of economocracy must apply to crucial situations and that could happen through EPR which constitutes the acronym of Economic Productive Reset. EPR succeeds in the substitution of economic consequences with economic stability and while supporting

changes achieves face austerity. Using EPR fluctuations could be avoided, which is enforced by the simultaneous vanishing of the global debt with mild influence on prices; contemporaneously retaining the currency rates. The success of this plan is required a political agreement between nations, possibly through a commitment among the participants of the G20 (see eq. 4). The reforming of debts must be proportional to their GDP and the magnitude of their credit rating, while the nations, that this adjustment exceeds their debt, should receive a specified amount of money (but these savings should not be used for military purposes). EPR deducts that each country according to its GDP should take a proportional amount of money, by increasing its liquidity. This allows the payment of each debt or part of it, differently could be able to keep and save this money for other purposes (Blanchard, Cerutti, & Summers, 2015). This amount of money does not change currency rates as it remains proportional to GDP. At the same time, it does not cause inflation, as it belongs to the loan and serves the debt since this money can be calculated as savings of the loaners. EPR expresses the magnitude of the declined debt that each country could receive according to the chosen coefficient that countries would be in commitment.

7.2. E.P.I. (Economic Periodic Injections)

The economic contribution with frequent support to all countries can happen with EPIs, which derives from the acronym Economic Periodic Injections. The mechanism for this function to succeed is through injections of agreed capital to serve the basic social structures, like education and health. That way the economy of various countries could avoid peculiar problems of many economies that suffer from a chronic abundance of infrastructures, or territories that suffer from war. The developed countries, in this case, could use EPR money for other purposes, except military aims. Because this amount of money should be small according to average GDPs it can be constant, otherwise, it should be proportional to the GDP of each country, keeping that way stable the currency rates.

8. Mathematical applications

The representation of the equation that performs these treaties is the following:

$$E_{jk} = e * (\widetilde{GDP_j} + c_k) + i * (\widetilde{GDP_j} + s_j)$$
(1)

where,
$$j = 1,..., n_1$$
 and $k = 1,..., n_2$

The symbol that represents the described equation is E_{jk} and determines the amount of money that should be received from each country. The coefficient of e shows the amount that should be agreed, on for the size of EPR, and that will advocate the balance of the global economies (e could be a variable), while i represents the agreed value for EPI. The $\widehat{GDP_j}$ shows the estimated value of GDP. The c_k factor determines the peculiar issues of some economies which must be included in the estimation, like credit rating. sj specifies the distinctive characteristics and needs of each economy, especially for health care. Also, j, k determined to be indexed, n_1 to be the total number of countries, and n_2 to be the additional help for special economic circumstances, with $n_1 \ge n_2$. In the case of debts should be used EPR with the magnitude of e without the presence of i. Otherwise, for EPIs estimations, the factor of i should be preferred, while the estimated value of e should be avoided. Else, a mixed combination of them must be applied. The appropriate economic conditions should be taken e >>i.

The aggregate amount of stability in economocracy is determined by the relationship:

$$E = \sum_{j=1}^{n_1} \sum_{k=1}^{n_2} E_{jk} \tag{2}$$

Where $j = 1,...,n_1$ and $k = 1,...,n_2$

This equation defines the amount of money, E which is required for international balance and serves contemporaneously the democratic and economocratic issues. The function which demonstrates the influence of economocracy, \tilde{E} is determined by the equilibrium:

$$\widetilde{E} = \widetilde{EPR} + \widetilde{EPI} + \sum_{i=1}^{n_1} \widetilde{f}_i \tag{3}$$

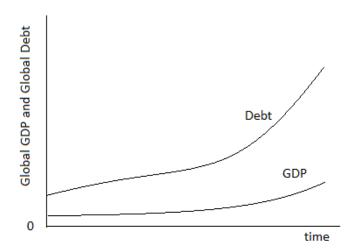
The element of \tilde{f}_j construe the economic structures of each economy accordingly. The definition of estimated \widetilde{EPR} and \widetilde{EPI} delineated by the forms:

$$\widetilde{EPR} = e * (\widetilde{GDP_i} + c_k) \tag{4}$$

$$\widetilde{EPI} = i * \left(\widetilde{GDP_j} + s_j\right) \tag{5}$$

The global GDP track and global deficit are demonstrated in the following graph:

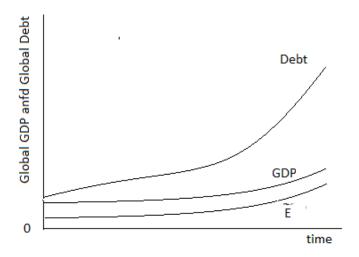
Fig. 2 Track of global GDP and global Debt (author's scheme)



In the graph in Fig. 2, it is obtained that the global debt increases more than the global GDP. This will cause an economic deadlock, and this is the reason why it is so important the theme of \widetilde{EPR} and \widetilde{EPI} . It comes up from the previous diagram that the debt and the GDP have an exponential increase. It is received that the exponential increase of the debt, is an issue that must be solved, and this could happen using the \widetilde{E} (see Fig. 3). So, in the case of global debt, the rate is increasing much more, than in the case of GDP, and this is the cause that the factor of the influence of economocracy must be used to arrange the enormous global debt.

The role of \tilde{E} appears in the next diagram:

Fig. 3 Impact of \widetilde{E} (author's scheme)

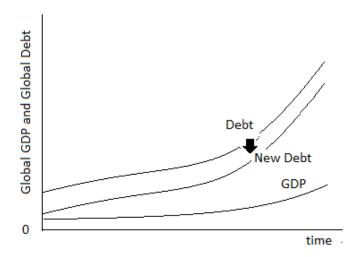


The magnitude of \widetilde{E} depends on e and i. The height of \widetilde{E} in the graph (see Fig. 3) is determined by these two impact factors. According to the magnitude of e and i, it is plausible to achieve the wished global policy growth. The influence factor of economocracy is proportional to the amount of GDP. In this case, obtained that the factor of the influence of the economocracy is proportional to the rate of the GDP of each country. So, it is deducted from the previous diagram that the global GDP follows the global GDP, and this is the reason why this model is fair for all countries. It is fair because each country has benefits that are to its GDP. This means that the countries that have enormous GDP rates will have a higher decline in their debts. On the other hand, countries that have low GDP rates will be able to make structural reforms to their economies. These reforms will allow these countries to make the proper reforms to face structural economic issues. Then the new debt is determined by the equation:

$$Debt_{new} = Debt - \widetilde{E}, \text{ or } |Debt_{new}| = |Debt - \widetilde{E}|$$
 (6)

It is concluded that:

Fig. 4 Reformed debt (author's scheme)



According to the previous graph (see Fig. 4) it is concluded that the new global debt is a result of the influence factor of economocracy, with the global debt. The new decreased global debt

is the impact of the world's widely produced GDP. From equations 3 and 4, it is obtained that the rate of the new global debt, is not only dependent on the GDP but and on the agreement of the authorities. This agreement between countries through the authorities is crucial for the amount of global debt that will be subtracted. So, the authorities control the range of the amount that would be decreased from the global debt, using the multipliers e and i.

On the other side, any country could determine how much benefits will gain in comparison with other countries. This would be determined by the GPD. Then it is concluded that the total amount of decline of global GDP is a choice of the authorities, but the benefits that each country will have in comparison with the other countries is an issue that pends on each country separately. The financial aspect and the GDP in a mixed role, contribute to the decline of the global debt. Then, the economies it is plausible to avoid the pressure of the loaners. This leads the economies of all countries to an advanced stage, meaning that they are set free to make reforms to their economic and social structures. Especially the weaker countries have a chance to fix their social structures, especially in the case of bureaucracy, education, and the health care system. This is the reason why economocracy and democracy seem to be a brotherhood. Democracy serves better the social principles in stable economic conditions. The theme is that in weaker economies the social structures, function better when the economic conditions are at the appropriate level. The stronger economies with the right economic administration have the chance to improve their existing structures, and in addition, enhance their advanced technological aspects. One more thing is what happens when to one country the amount of debt is less than the amount of E. In this case, the surplus should be offered in terms of liquidity. But there must be some constraints. The basic constraint is that these amounts should not be used for military purposes because they will cause disastrous effects on the behavior of the nations. The philosophy of economocracy and democracy is different, as it emphasizes principles that have different orientations.

Formed on the previous statements, the overall characteristics of these results are these:

- It is needed a proportional increase of liquidity by each country.
- The increase in liquidity depends on the GDP of each country.
- The economic benefits are proportional to the GDP of each country.
- Needs an agreement between all nations to face global debt. In general, these pros are since the simultaneous increase of liquidity is completely financial and a result of the real economy by each GDP. And can be financially out of charge for each country (by a commitment which is plausible because following this model currency rates stay stable and no fluctuation could happen, as this money belongs to debts that in any way would be paid).
- Weaker economies and war territories have the chance to improve their social structures.
- It is a global growth model that covers all countries.

The magnitude of E induces the propensity of economic flourishing in technological, law, and scientific issues concerning social improvement.

One more issue is the minimum utility that the application of the economocracy could have, so:

$$\widetilde{E} = \widetilde{EPR} + \widetilde{EPI} + \sum_{j=1}^{n_1} \widetilde{f_j} \text{ s.t. } Debt_{new} = Debt - \widetilde{E}$$
 (7)

Then, it is considered the e and i as variables, but in the case of agreement between countries, therefore a specific magnitude comes up after agreement. So, analyzing it is received that:

$$\mathcal{L} = (1 + \lambda)[e * (\widetilde{GDP}_j + c_k) + i * (\widetilde{GDP}_j + s_j) + \sum_{j=1}^{n_1} \widetilde{f}_j] - \lambda (Debt - Debt_{new})$$
(8)

$$\{\frac{d\mathcal{L}}{de} = 0, \frac{d\mathcal{L}}{di} = 0, \frac{d\mathcal{L}}{d\lambda} = 0\}$$
(9)

Therefore, received that:

$$\tilde{E} = Debt - Debt_{new} = \sum_{i=1}^{n_1} \tilde{f}_i$$
(10)

The equation (10) shows that the minimum utility that each country's economy could receive is pending the economic structures that any country has. This conclusion complies with the decline in debts that is proportional to the GDP of each country, but the minimum benefit for each country must be proportional to the economic structures that have, and how robust are these structures. It is received that equation (10) is the same case that the factors e and i are equal with zero, and only a minimum amount for each country separated is agreed from the authorities, pending only on the economic structures that any country has.

10. Estimations

Furthermore, it is used as an instance an application for the US, China, Nations facing War, Germany, UK, France, Italy, Japan, Canada, India, Brazil, and Spain. Therefore, using e=0.5 and i=0.1, where the rest coefficients are left intentionally equal to zero, is concluded in the following table:

Country	GDP (million	EPR (million \$)	EPI (million	\widetilde{E} (million \$)
	\$)		\$)	
US	18,569,100	9,284,550	1,856,910	11,141,460
China	11,199,145	5,599,573	1,119,915	6,719,488
Germany	3,466,757	1,733,379	346,676	2,080,055
UK	2,618,886	1,309,443	261,889	1,571,332
France	2,465,454	1,232,727	246,545	1,479,272
Italy	1,849,970	924,985	184,997	1,109,982
Japan	4,939,384	2,469,692	493,938	2,963,630
India	2,263,523	1,131,762	226,352	1,358,114
Canada	1,529,760	764,880	152,976	921,856
Brazil	1,796,187	898,094	179,619	1,077,713
Spain	1,232,088	616,044	123,209	739,253

Total	51,930,254	26,606,069	5,193,026	31,162,155

Table 1 Application of \tilde{E} for 2016 (author's table)

Pending on the previous table, which came from the use of equations (1) to (5) the new debt in a hypothetical situation using equation (6), could be determined by the next table:

Country	\widetilde{E} (million \$)	Debt (million \$)	$Debt_{new}$ (million \$)
US	11,141,460	19,947,680	8,806,220
China	6,719,488	4,609,682	-2,109,806
Germany	2,080,055	2,368,776	288,721
UK	1,571,332	2,238,405	667,073
France	1,479,272	2,380,887	901,615
Italy	1,109,982	2,455,626	1,345,644
Japan	2,963,630	10,427,566	7,463,916
India	1,358,114	1,575,468	217,354
Canada	921,856	1,413,865	492,009
Brazil	1,077,713	1,408,987	331,274
Spain	739,253	1,225,565	486,312
Total	31,162,155	50,052,507	18,890,332

Table 2 $Debt_{new}$ (author's table)

It is obvious that in some countries happens a sustainable decline in debts, and in other countries, there is not any debt and simultaneously come up with a deposit of an amount of money, like the case of China and Nations facing War. Therefore, there are these key points:

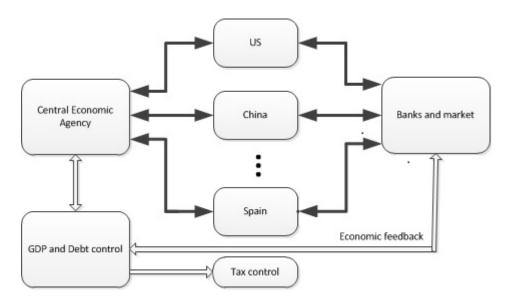
- No inflation could occur because this amount of money does not enter the markets.
- This amount of money is going directly to the loaners of the debts.
- No difference in the GDP rate between countries could occur because the changes in GDPs are proportional, so then the rate between GDPs stays stable.
- No change in the demand could happen as this amount of money for healthcare and education system is for the existing public sector, the only change could be in the offering quality.

• The case that in a global view some countries are not democratic doesn't affect the economocracy. The reason is that these countries could be affected in their infrastructures to be more democratic, as the dependence and the pressure from a non-democratic state would be less on the citizens.

- No change in currency rate could happen as the dynamic between economies is constant.
- The new deposits of some countries (like the case of China and Nations facing War), will not enter their markets but will be used for education, the health care system, and other special issues. Or this could be completely arranged, be no increased deposits for any country, by choosing lower coefficients.
- There is a condition that this money increase must happen simultaneously in all countries, to be not possible to affect the dynamic between the economies.
- There must be an economic agency that will control this mechanism, for paradigm IMF or any other economic agency, which will be responsible for that economic mechanism.
- This amount of money under this Central Economic Agency could be free of charge, as it is a financial increase that doesn't affect any country. It is a pseudo-increase, as no charge could happen without any interest rate, but with real effect for the loaners, as they receive their benefits from their loans.
- All the banks will be affected positively and at the same time the citizens, as there would be possible to loan more money, and the entrepreneurs could expand their activities in more robust economies. The mechanism that this economic system works is illustrated in Fig. 5.
- Fewer debts allow authorities for fewer taxes to taxpayers.
- The results of table 2 are consistent with the change in the debt in Fig. 4. The interpretation of debts is that the old debts are purely connected with the real economy. The new debts are a mixed situation, of a transformed debt that is more financial than the old one.
- It must be noted that the analysis in tables 1 and 2, is based only on twelve countries, but in a real application of economocracy, it must be used for all the countries for the prior reasons.
- It is possible to avoid any minus result in Debt_{new}, eliminating with that way any deposit, with scope to restrict the changes only to the decline of debts. This could happen using the appropriate coefficients.
- If some countries don't want to proceed to a commitment, then they're no sufficient disturbance that could happen in the global economy. The only negative issue would be that these countries will lose an opportunity to administrate their deficits.
- This paradigm shows that all countries have the appropriate benefits; the same happens in any country with a weak, intermediate, or strong economy.
- Moreover, the mechanisms of economocracy are plausible to control and press the non-democratic states to comply with the rest excluding them from the EPR or setting them smaller multipliers for the EPR estimations. But there is a limit it can't be used by many countries because then there will cause a disturbance to the global economy. But, for a few countries, and in special cases, the disturbance will be insufficient (subject to that is not possible for nuclear powers for safety reasons, here the economic condition is inelastic, and should always be considered by the EPR).

Also, the scheme of how this economic mechanism works it is illustrated that:

Fig. 5 Economic feedback (author's scheme)



The previous scheme illustrated the way that the Central Economic Agency controls the GDP and debts according to this theory, making it easier for the sustainability of the banks and the markets. Moreover, this economic feedback is interactive between markets, and banks with the GDP and debt control, meaning that both affect each other. The public authorities of the countries with the new lower debts are plausible to control their tax rates to lower levels. It must be mentioned that the factors of the prior equations are determined by the commitment of the authorities and based on that are used exogenous coefficients. But the relation between dependent and independent variables is scrutinized afterward, as the GDP and debts are concerned as endogenous variables since both are in interaction. The estimation results of the regression analysis are as follows:

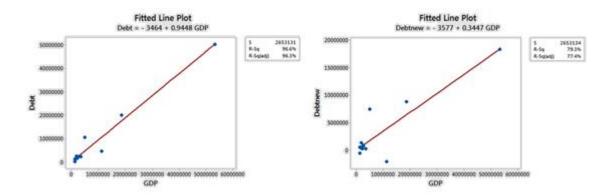
$$Debt = 7731281 + \begin{bmatrix} 1232088 \\ 1283162 \\ 1529760 \\ 1796187 \\ 1849970 \\ 2263523 \\ 2465454 \\ 2618886 \\ 3466757 \\ 4939384 \\ 1199145 \\ 18569100 \end{bmatrix} + \begin{bmatrix} -6505716 \\ -7530461 \\ -6317416 \\ -6322294 \\ -5275655 \\ -6155813 \\ -5350394 \\ -5492876 \\ -5362505 \\ 2696285 \\ -3121599 \\ 12216399 \end{bmatrix} + \varepsilon_{i}$$
 (11)

And

$$Debt_{new} = 2818655 + \begin{bmatrix} 1232088 \\ 1283162 \\ 1529760 \\ 1796187 \\ 1849970 \\ 2263523 \\ 2465454 \\ 2618886 \\ 3466757 \\ 4939384 \\ 11199145 \\ 18569100 \end{bmatrix} + \begin{bmatrix} -2332343 \\ -3387732 \\ -2487381 \\ -1473011 \\ -2601301 \\ -1917040 \\ -2151582 \\ -2529934 \\ 4645261 \\ -4928461 \\ 5987565 \end{bmatrix} \begin{bmatrix} GDP_{Spain} \\ GDP_{India} \\ GDP_{India} \\ GDP_{Italy} \\ GDP_{France} \\ GDP_{UK} \\ GDP_{Germany} \\ GDP_{Russia} \\ GDP_{China} \\ GDP_{Ch$$

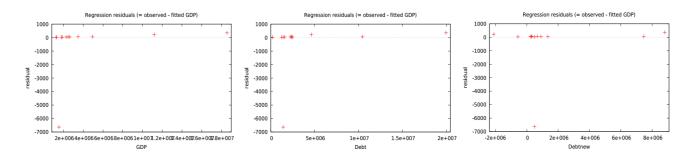
Analyzing the GDP in the case of new and old debts it is concluded that:

Fig. 6 Regression analysis of new and old debt (author's scheme)



According to the regression analysis is obvious that R² is high in both debts. It is expected the small decline of R² to the new debts are more financial debts and doesn't reflect the markets and the GDP of the economies directly. It should be considered that the p values are statistically significant taking as a limit the magnitude of 0.01. This means that GDP and debts are in strong interaction, as debts can affect the GDP, and to an extent, this works inversely through feedback (see Fig. 5), as GDP affects debts. Moreover, in the GDP, Debt, and Debt_{new} is no need for calculations in lags, to the stationarity examination of unit root tests. The residuals are at the appropriate level as illustrated below:

Fig. 7 Residual analysis of GDP, Debt, and Debt_{new} (author's scheme)



Formed on Fig. 7 it is concluded that there does not exist any important deviation between observations and predicted values, of the residual analysis of GDP, Debt, and Debt_{new}, respectively.

11. Representative Economocracy

Representative Economocracy uses two more guarantees to protect Democracy:

- 1. Geopolitical sensitivity (SSA -Sensitive Stability Areas)
- 2. Democratic Economocratic state
- 3. GDP

The economic system of Economocracy uses the third factor. The first two factors are Representative Economocracy. The Representative Economocracy uses classes and puts the countries with higher GDP in the same group, and lower in other groups, pending on the GDP. But it must also secure Democracy, as Economocracy is the sister of Democracy and secures its existence. Democracy protects the freedoms and rights from a political view and Economocracy protects them from an economic aspect. Analyzing the factors:

Class	Economocratic income	Countries
Class A	Class A receives money	U.S, China, France, Germany, U.K., Spain, Italy, Japan, Greece, Cyprus, Australia, Scandinavian countries, Nations facing War, etc.
Class B	Class B receives money	GDP _B countries
Class C	Class C receives money	GDP _C countries
Class D	Class D receives money	GDP _D countries
Class E	Class E receives money	GDP _F countries
Class F	No receive or limited money	No pure democratic countries

Table 3 Class ranking (author's table)

The countries which cause wars can be put into class F causing them economic control. The countries that are not democratic and economocratic and belong to class F, should receive only money for the education and healthcare system, and not for the debt until to comply with these principles. From the prior instance of an application of the Economocratic system, the minimum GDP which defines the class of the economies is the subject of an agreement between the nations. Representative Democracy is the only economic system that faces the unbalances that the interest rate causes to the economy. Economocracy does not affect the balance of the economy, as the amount of money goes directly to the debt, and specifically to the sector of education and medicine, globally. At the same time, serves the aspects of Democracy, by the lack of influence that the economy causes on the democratic aspects. Therefore, Democracy can function without any external influences. The function of interest is like the function of economocratic income, but the one increases debt and the other one decreases it, and without

canceling it, meaning that it does not affect issues of the economy. Of course, there could be infinite versions of types of Democracy and Economocracy, but the main purpose is to achieve the economocratic and democratic principles.

12. Discussion

As illustrated in the case of global debt and the global GDP must be examined under a worldwide view. It is not possible to achieve an effective solution without the ultimate approach to this case. The impulses of the economic system of economocracy are in a different view than the existing one. Regional solutions, which come separately from each country are not possible to face the increasing debts. An overall approach offers the key element of the free of charge of money. The free-of-charge money is the amount of the declined debts that come from the new GDP which is more financial. As previously mentioned, the simultaneous administration of liquidity offers a fully different approach in economics. Then free-of-charge liquidity is a financial solution that comes from the GDP rates of each country. The key concept is that this economic system is not possible to affect the currency rates between countries and doesn't cause any fluctuations. This means that no change could happen between the present dynamic of economies, meaning that the economy of any country couldn't be stronger than other countries' economies. Contemporaneously all countries could achieve to decline in their debts, receiving the benefits from that situation, like the reduction of tax rates, and the increase of deposits in the banks, the markets, and the public sector. Then, the decline of debts serves both the loaners and the countries. The theme is that the application of the mechanism of economocracy must happen simultaneously in all countries, and the reason is that this way doesn't affect the economic structures of any country. All countries are staying in the same condition; that was before the change in global debts. At the same time, the reduction of debt allows the sustainable growth of all economies, without the pressure of the obligations that come from the loaners. Additionally, the impacts of economocracy are important to the political system of democracy, as economically unstable countries are plausible to be more insecure, and less protective of basic rights. This is based on the thought that wealthy and stable economies serve better the principles of democracy.

The fundamental principles of individual, social and political rights are protected in an economic system that is independent of the obligations of the high-interest rates. The deposits of the public sector and the lower tax rates could allow taxpayers to have better quality in their public structures. Moreover, fewer payments to taxes, allow the taxpayers to save more money for consumption, and their needs. The pressure of the debts causes a lack of liquidity, with all aspects that this situation causes to any economy. In this situation is not possible for any economy to continue to develop all of its sectors in the same way. Therefore, it is concluded the importance that economocracy has to democracy, as economocracy stands for these aspects, of individual, social, and political rights, through investments in education, and the health care sector. Then, the discussion about the increasing debts seems that has a solution. The conclusion is that economocracy offers a mechanism that allows countries to administrate their debts, according to their GDP. Therefore, the taxpayers could pay fewer taxes, and the public sector of each country could have more deposits.

13. Conclusions – Economic and Political aspects

The transition from Capitalism to Economocracy doesn't have any problem, as it is initially a matter of G7 or G20 and then an agreement between nations for a global unit for free money, according to the conditions of Economocracy and Democracy (or, in general, an international agreement). The countries which do not agree will lose money and will belong to an economic zone with low credibility as will not comply with the humanitarian standards. In a rational way, most countries will prefer to have humanitarian standards, lower food income for their citizens

(especially third countries), countries that after a plausible war would have access to free money, to rebuild their countries, etc. In addition space colonization, or general space technology will be developed at a very low rate without Economocracy, because Capitalism serves only the profits, on the contrast Economocracy covers all economic purposes (that capitalism can't face, like debts and interest rates, or plausible banking collapse and disturbances in periods of depression), allowing to give the direction of a solution to any theme, e.g. hunger, space programs, colonization, etc without waiting when the society will be able for according to the conditions, as the Economocracy arranges the democratic and economocratic conditions to face any instance. Moreover, the authoritarian countries will prefer to have the guarantee of Economocracy and will be less authoritarian if they like to have the services of Democracy and Economocracy. Economocracy at some point in time will emerge as a physical aspect of the problems and the dysfunctions in political rights and in general in human rights (and not only), because the guarantee of Economocracy will serve the best way the democratic and economocratic principles, it is only just matter of time to collapse capitalism and authoritarianism, as they have fundamentally not appropriate thesis in the development of the world.

Capitalism is based on profits, so many times it does not identifies the needs of human evolution, as profits for instance could be against the planet's conditions. To take into consideration only the profits is not in the same line with the general needs of humanity, and in general with the scientific direction of the thing. Economocracy can administrate the loss of profits by plausible restrictions, by supporting the lack of profits with restrictions and precautions e.g. In the case of global warming a strict global restriction could be held if the loss of these profits is covered by the economocratic amount of money. Or the control of inflation from energy problems could happen by economic support of economocratic money by covering the increase of prices, protecting from the increase of the prices in the products.

Finally, Economocracy could establish an international currency, the economocratic currency to serve the prior mentioned purposes. Then, the countries in the future will have the chance to establish a united economy under one economocratic currency, or at least they can keep the Economocracy in it is initial form, by separating national currencies and choosing one of them for the economocratic money. Or to avoid any conflict the economocratic money could be automatically formed into local currencies, in respect of some other currency (probably the highest rated). In any case, the existence of Economocracy and Democracy in any form will be served the economocratic and democratic values.

The results of a hypothetical application of Economocracy with theoretical and mathematical analysis are represented above, and it is shown that is plausible to be applied the Economocracy.

Therefore, Economocracy achieves to avoid the economic consequences of austerity and it is possible to be activated by political commitment between countries. Authorities could use law terms to have an agreement for nations. The reciprocal action between economocracy and democracy bails the intercommunication in individual sectors of science to a unified aim and common prospect. The GDPs would be used as a force for the economies to proceed with structural reforms of their economies. Finally, economocracy is a sufficient way to face increasing global deficits through a global growth model.

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