

Participatory Budgeting (Portugal) as a marshalling legal process to formally and democratically defining European Monetary System and Policy

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Summary

This paper explains the legal foundation and presents the empirical results of the XXI Portuguese Constitutional Government's pioneer initiative – The Participatory Budgeting Portugal (PBP) – which consecrates a democratic, direct and universal process allowing civil society to decide on public policies and investments in different governmental areas. The PBP's key objective is to bring people closer to politics and decision making at a regional and national level, consolidating the principle of popular sovereignty that has already been exercised locally through one hundred and eighteen participatory budgets. Citizens have recently decided how to spend three million euros in certain areas defined by national government. From the results reported, interesting and concrete conclusions can be drawn and implemented in the next edition already confirmed.

Since the EU budget faces a tough challenge to fund more with less, the PBP's

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experience can be leveraged as a European ground-breaking policy in order to guarantee the ontological function of any political and economic organization: that is to ensure the welfare of all persons under its jurisdiction and to impede the retrogression of human rights. The time has come to write and develop lines of code of the EU values by creating a legal environment that enables citizens to participate directly in the design of genuine and logical monetary system, focused squarely to support the strengthening scientific role of the Euro.

Key words: Participatory Budgeting, International Law, Monetary Policy, Innovation, Behavior Economy

JEL codes: D23; D72; D78; D9; E52; E58; E61; F02; F33; H69; K40; O23; O31

1. Introduction

The world is facing an abundant set of systemic destabilizing tendencies on a daily basis – *i.e.* the growing monetary inequality, the lack of assurance and full adherence of fundamental human rights and freedoms, the worrying trend of reducing trust in political and democratic institutions – which promotes the appearance of

collective intelligence movements and reactive manifestations from citizens¹.

In Portugal, citizens have been experiencing a serious and transversal lack of confidence in the pillar sectors of society, for instance: political system, financial system, agriculture, fisheries, protection of forest, health, education, media, intelligence services and justice where the administration and application of the rule of law isn't effectively and efficiently applied.

As a consequence the XXI Portuguese Government included in its political programme the compromise to create a participatory budgeting nationwide, based on the constitutional premise that the Government, the Parliament and the Courts administrate the *res publica in the name of the citizens and for the citizens*. It is Portugal's will – and not only the Government's will – to take care of democracy by allowing any Portuguese individual or foreign citizens who have the legal right to live in Portugal, aged 18 or more, to elaborate and choose its favourite public policies and clarify their price formation and development².

The present article sets out to show how participatory budgeting increases opportunities for participation by becoming a multidisciplinary field of dispute and conflict resolution where concepts from law, philosophy, political science, sociology, anthropology, economics, psychology, physics, game theory, decision science and deliberative democracy merge in order to

¹ See Gianluca Sgueo, Gamification, Participatory Democracy and Engaged Public(S), University of Vienna „Activation – Self-Management – Overload Political Participation beyond the Post-democratic Turn“, p.4. Available: <https://ssrn.com/abstract=3045361>

² See Maria Manuela Leitão Marques, Audition of the Ministry of the Presidency and Administrative Modernization, given in front of the Budget, Financial and Administrative Modernization Parliamentary Committee on the 10.05.2017. Available at <http://www.parlamento.pt/ActividadeParlamentar/Paginas/DetailheAudicao.aspx?BID=105120>

promote better qualitative solutions to human problems. Empirical data analysis from the Portuguese experience and support from relevant monetary literature is used to assess that knowledge and practice of participative processes, locally and nationwide, shall be expanded and conducted into transnational organizations, adding yet another dimension of cultural and scientific value to the design of a new monetary system.

After some legal reasoning regarding monetary conundrums, the main goal is to establish the conditions that advocate the design and functioning of the new monetary system.

2. Legal foundation and technical principles of Participatory Budgeting Portugal

Participatory budgeting contributes not only to problem solving, but increasingly calls for creative avenues for engaging public policy-making. This process is ultimately called *Public Gamification* which consists in taking something that already exists – i.e. a website, an enterprise application, an online community, a competition that is created by an agency, non-profit organization or municipality – integrating game mechanics that motivate participation, engagement, trust and loyalty through Law.

Experiences in Portugal reveal that citizens effectively participate when asked what they wish for their cities³. Therefore, this national participatory budgeting constitutes an excellent opportunity for building a sustainable political project of citizen participation, promoting a greater integration between territories by means of nationwide projects.

³ In the last ten years, 118 (one hundred and eighteen) from 308 (three hundred and eight) municipalities have adopted the participatory budgeting locally, distributing 91 million Euros which represents a growing tendency of innovative and efficient methods of political participation.

2.1. Legal Foundation

Under the government's proposal, Law N^o 42/2016, 28th December approves the State Budget for 2017 and consecrates in Article 3 the creation of Participatory Budgeting Portugal (PBP).

In accordance with sub-article 1 and 5 of Article 3 of the referred law and in conformity with subparagraph g) of Article 161 and subparagraphs a) and b) of sub-article 1 of Article 165 of the Portuguese Constitution the implementation of the PBP is regulated by the Council of Ministers Resolution N^o 25/2017, 30th January published in the Official Gazette of the Republic of Portugal, 1st series – N^o 21, of 30th January 2017. In this case the cited resolution defines the technical principles, methodology and procedural legal rules applicable to the PBP's 1st edition.

The Participatory Budgeting Portugal's key objectives are: a) to reinforce the quality of democracy, valuing participatory and direct democracy based on the Portuguese Constitution framework; b) to involve citizens in the decision processes by promoting an informed and active participation; c) to urge social and economic cohesion, powering the emergence of projects that link citizens from different places.

These goals are integrated in Article 1 and subparagraphs b), c) and d) of Article 9 of the Portuguese Constitution exalting the legal foundation of our social contract: people's will and the fundamental task of the State in guaranteeing the full compliance and respect of fundamental rights, freedoms and the principles of democratic rule of law in order to foster social and individual wellbeing, real equality amongst citizens and effective enforcement of economic, social, cultural and environmental rights through the transformation and renewal of social and economic structures.

2.2. Technical Principles

Participatory budgeting requires clear rules for participation and decision making. Nevertheless, this openness to citizen participation is somehow technically watered-down regarding the Portuguese experience as shown below.

2.2.1. *The principle of interconnection between theme and territorial scopes*

For instance, projects admitted to the competition, whose territorial scope is Continental Portugal and in the year 2017, can only be related with the areas of Agriculture, Culture, Science, Adult Education and Formation. On the other hand, projects oriented to the autonomous regions of Azores and Madeira in the year of 2017 must be related to Justice and Internal Affairs.

Besides, there are two proposal categories: regional and national. The proposals with regional range must have an impact at least in two municipalities belonging to the same region identified in NUTS II⁴. Nationwide proposals shall have an impact at least in two regions of NUTS II.

As a result, the legislator intends to limit citizen's activism only admitting proposals that specify a binding interconnection between themes and territorial scope.

2.2.2. *The principle of eligibility criteria*

To avoid an automatic exclusion from the competition, candidates must present proposals that respect the following criteria:

- a) embrace one of the topics identified in Article 4 of Council of Ministers Resolution N^o 25/2017, v.g. culture, agriculture,

⁴ The Nomenclature of Territorial Units for Statistics (NUTS) is developed by Eurostat and employed in Portugal. The NUTS II regions correspond to five regions located in Continental Portugal – v.g. North, Central, Lisbon Metropolitan Area, Alentejo and Algarve – administered by the respective Commissions for Coordination and Regional Development, plus the alluded two autonomous regions of Azores and Madeira.

- science, education and adults training, justice and internal affairs;
- b) transparent and detailed scope, identifying the model of execution and delimiting the territorial area in order to allow analysis and cost evaluation;
 - c) do not imply the construction of infrastructures;
 - d) do not configure support requests or provision of services;
 - e) do not counteract Government policies or existing projects or programmes;
 - f) technically feasible;
 - g) are not too generic or too wide-ranging, not allowing its transformation into a project;
 - h) do not exceed the amount of €200.000,00 (two-hundred thousand Euros) and cumulatively the deadline execution of 24 months;
 - i) have impact at least in more than one municipality in case of a regional proposal; or in more than one region in case of a proposal with national scope.

The violation of any of the abovementioned criteria determines the exclusion of competition.

2.2.3. The principle of the award allotment

Citizens decide where to invest three million Euro. This budget amount is defined according to common practices used worldwide in public gamification experiences, whose first editions usually involve small financial amounts considering the need to test and uphold criteria.

Besides, the eight proposal group winners – i.e. National Projects, the five continental regions (North, Centre, Lisbon Metropolitan Area, Alentejo and Algarve), the Autonomous Region of Azores and the Autonomous Region of Madeira – are entitled to share the same amount of money, which is € 375.000,00 (three hundred and seventy five thousand Euros).

The Government's intention is to provide a budget allocation to every group proposal

in order to ensure the existence of project winners in all regions. However, regional development and evolution of inter-regional synergies are undermined not only in terms of the small size of the award but also its allotment to forty two winners⁵, factors that minimize the impact of this public policy in the lives of citizens, violating the principle of proportionality in the dimension of adequacy prescribed in Articles 2, 3 and sub-article 2 of Article 266 of the Portuguese Constitution.

2.2.4. Principle of procedural transparency

According to Article 8 of the Council of Ministers Resolution N^o 25/2017, 30th January, the PBP 1st edition defines five phases during the procedure which lasts approximately nine months.

The first phase requires that the candidate formally presents and discusses, in person, the proposal in one of the participatory meetings scheduled in the main cities that make part of the seven regions that constitute NUTS II⁶. It is followed by the online submission of the proposal through the Participatory Budgeting Portugal site.

In the second phase competent ministries and supervised public services assess the admitted proposals by elaborating a technical analysis and providing technical support to transform proposals into projects already concerning scheduling, execution mode and cost estimation.

A third aspect is set forth in Article 11 for the participants who have the right to use a fair hearing – *v.g.* a complaint – after projects have been provisionally admitted or rejected and before the notification of the final list which covers projects submitted to vote.

Subsequently, Article 12 prescribes that the voting phase enables any Portuguese citizen

⁵ The competition winners are available at <https://opp.gov.pt/projetos-vencedores>

⁶ According to sub-article 3 of Article 9 of Council of Ministers Resolution N^o 25/2017, 30th January, this is an imperative formality to guarantee the technical analysis from the competent entity.

or foreign citizen legally authorized to live in Portugal, over 18 years of age to exercise doubly the right to vote – one for regional and one for national projects – through the online portal <http://opp.gov.pt> or SMS (Short Message Service), followed by the introduction of the respective citizenship or temporary/permanent resident card number.

The last phase corresponds to a public presentation of prizewinners through the competition online portal and also of a performance assessment that shall be open to citizens, private and public entities in order to promote better cost-benefit efficiency and legal effectiveness, thus reinforcing the application of general principles of law foremost: sound administration, close collaboration between citizens and public institutions and last but not least public interest derived from citizens' will.

2.2.5. The principle of enforceability of decisions

Every project winner gets the form of a public contract that is enforceable, which means it is gifted with the force of law to fulfill a public task that is constitutionally foreseen.

3. Results and conclusions of Participatory Budgeting Portugal

To establish the level of acceptance and participation of PBP's 1st edition an assessment has been made of the data set out in the competition website which accounted a total of one thousand and twenty-one proposals⁷.

Additionally, this information can be jiggled and leveraged into geographical and thematic approaches, as demonstrated below.

From the pool of proposals a substantial number of proposal have been accepted – more precisely 632 (six hundred and thirty

two) turned into an acceptance rate of 62% – in comparison with 385 rejections that represent a rate of 35%.

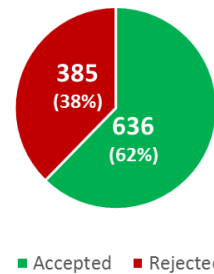


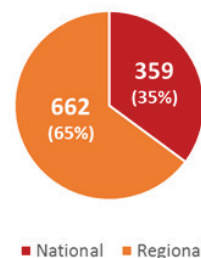
Figure 1. Total number of proposals

The majority of proposals is geared towards regional aims.

Table 1. Descriptive Statistics of Portuguese Population

Data Reporting Period	Place of Residence (NUTS - 2013) (1)	Resident Population (Nº) per Place of Residence (NUTS - 2013), Sex and Age Group; Annual	
2016	Portugal	10.309.573	100%
	Mainland	9.809.414	95%
	North Region	3.584.575	35%
	Lisbon Metropolitan Area	2.821.349	27%
	Centre Region	2.243.934	22%
	Alentejo	718.087	7%
	Algarve	441.469	4%
	Autonomous Region of Azores	245.283	2%
	Autonomous Region of Madeira	254.876	2%

Figure 2. Territorial scope of proposals



Source: INE – Resident Population (Nº) per Place of Residence (NUTS - 2013), Sex and Age Group; Annual - INE, Annual Estimate of Resident Population

⁷ All competition data provided in this Article is available at <https://opp.gov.pt/>

We can see in **Figure 2.** that six hundred and sixty two proposals have a regional purpose, representing 65% of the total universe in comparison with the three hundred and fifty-nine national proposals corresponding to a percentage of 35%.

To support our analysis we have imported Portugal's most updated demographic information – see **Table 1.** – through the site of the National Institute of Statistics also called Statistics Portugal to see if there is a direct correlation between the number of proposals and the density of population of each region.

The data presented in **Table 2.** and **Figure 3.** below enables us to report that the North, Centre, Alentejo and Algarve regions have a higher level of participation.

Notably the rate of proposals from Alentejo (20%), Algarve (10%) and Centre (30%) regions exceeds the respective demographic rate. In contrast the Lisbon Metropolitan – one of the most populous and urbanized regions – presents a very low rate of participation (6%).

Table 2. Correlation between Number of Proposals and Demographic Rate

	Number of Proposals	% Proposals	% Population
North	277	27%	35%
Centre	305	30%	22%
Lisbon Metropolitan Area (LMA)	59	6%	27%
Algarve	101	10%	4%
Alentejo	204	20%	7%
Azores	24	2%	2%
Madeira	51	5%	2%
Total	1021	100%	100%

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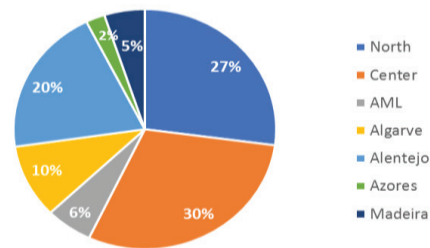


Figure 3. Proposals Rates per region

Eventually the fact that LMA is formed by the big metropolis-city of Lisbon –, the lifestyle of its inhabitants and PBP's range and low budget mostly oriented to regional proposals may have contributed to an objective discrepancy between the number of proposals and the region's demographic percentage.

Table 3. Top and Bottom 5 Cities Proposals

TOP 5 Cities		BOTTOM 5 Cities	
Porto	87	Beja	1
Aveiro	58	Leiria	2
Alenquer	57	Vila Nova de Gaia	3
Viana do Castelo	48	Guarda	5
Arcos de Valdevez	47	Santarém	5

Furthermore, **Table 3.** represents an interesting indicator to ascertain the origin of democratic activism and participation in the country. From the total number of 51 participatory meetings held in 47 cities throughout the competition, three of the TOP 5 cities – e.g. Porto, Viana do Castelo and Arcos de Valdevez – are located in the North region of Portugal. On the other hand three of the BOTTOM 5 cities – e.g. Leiria, Guarda, and Santarém – are located in the Central region.

An analysis of **Figure 4.** below illustrates that culture is the area with the highest rate of proposals (41%), followed by Education and Adults training (25%). Conversely Justice and Internal Affairs have lower participation.

Articles

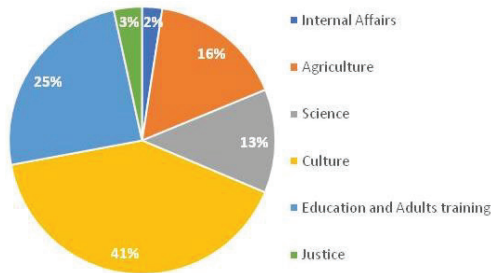


Figure 4. Proposals Rate by Subject

An assessment of **Table 4.** below demonstrates that science and culture proposals have the highest acceptance rate –77% and 74% respectively – compared with justice and internal affairs. Another interesting fact is that science proposals represent a small percentage of the 1 021 (one thousand and twenty-one) proposals.

Table 4. Proposals Acceptance Rate

Área	Proposals	Accepted	Rejected	Acceptance Rate
Internal Affairs	25	8	17	32%
Agriculture	167	95	72	57%
Science	128	99	29	77%
Culture	416	308	108	74%
Education and Adults Training	250	114	136	46%
Justice	35	12	23	34%
Total	1021	636	385	62%

It is true that only 601 (six hundred and one) accepted proposals have become actual projects since thirty five joint others.

The final number of projects for voting has been divided in two main categories: regional with 399 (three hundred and ninety nine) projects corresponding to 66% of the full number of proposals and national with 202 (two hundred and two) projects representing 39%.

Concurrently a reverse view emerges from the three hundred and eighty-five rejected proposals. As shown in the results set out in **Figure 5.**, Portuguese citizens have demonstrated a significant desire to participate directly in the introduction and design of other public policies that are not set out in the PBP's regulation. This statement represents almost 1/3 of the rejected proposals, as the 29% indicate. Subsequently, the Technical Committee has rejected a great number of proposals by virtue of describing these as technically unenforceable (15%) or as cases that configure support requests or service provision (15%). Also the percentage of rejected proposals alluding to ideas that counteract current government's programme and running projects and proposals (12%) can be interpreted as a sign of lack of awareness.

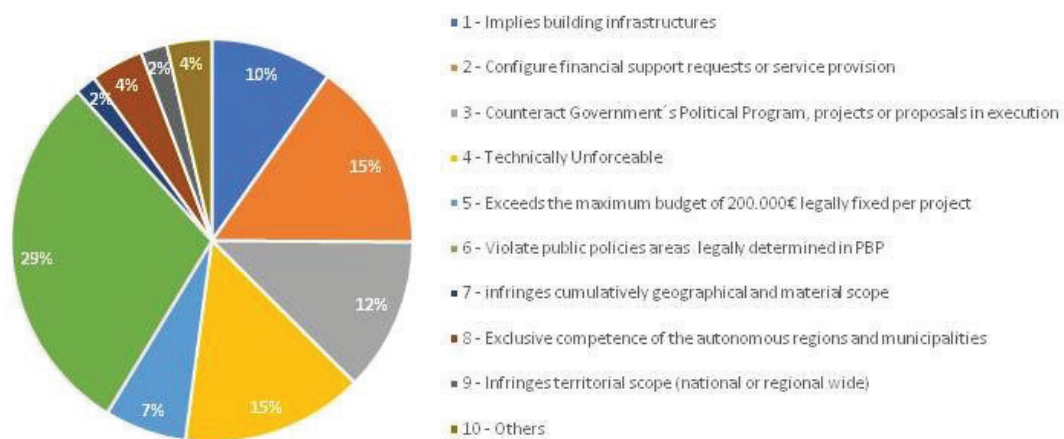


Figure 5. Rejections Rates

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On the other hand, 95% of project winners represent two or more municipalities, which means that regional domain prevails in a supposed nationwide competition, as shown in the figure below.

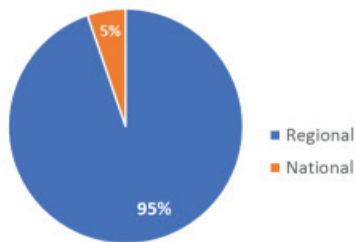


Figure 6. Winners Proposals by territorial scope

Only 2 (two) national projects from a total universe of 202 (two hundred and two) are successful which means something must change, financially and legally in order to make it more appealing to citizens. For this reason maybe the 70815 (seventy thousand eight hundred and fifteen) votes present a number that needs improvement, but never can be interpreted as a sign of indifference on the part of Portuguese citizens.

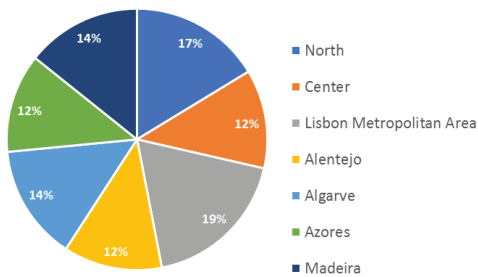


Figure 7. Winners by Subject

The final results of the competition show that 60% of winners come from cultural (39%) and scientific (21%) fields (see **Figure 7**). Taking into account the projects that have been submitted for voting – see **Table 4**. – Justice, Internal Affairs and Science areas are mostly favoured in comparison with Agriculture, Education and Adults training that stand below fair share.

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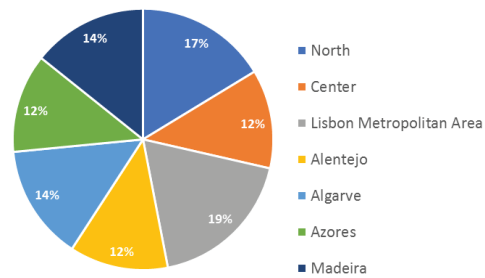


Figure 8. Winners by Region

Finally, **Figure 8** demonstrates that winner proposals are fairly distributed by regions, contradicting the strong tendencies of direct participation that some regions of the country – *v.g.* North, Centre and Alentejo – show. Hence, Lisbon Metropolitan Area, the Autonomous Regions of Azores and Madeira stay above fair-share while the most participative regions are below that share.

The brief overview of the results has led us to the following conclusions:

1. In Portugal the phenomenon of Participatory Budgeting is familiar locally but the readiness to participate in a similar initiative at a regional and national scale needs a significant improvement as the almost 80 000 votes in a pool of 9,4 million voters constitute a proof of evidence.
2. The proposals submitted during the first edition are predominantly regional - a fact that is undoubtedly related to the small budget grant and its allotment to several categories.
3. The North, Centre, Alentejo and Algarve regions have shown a significant participatory spirit by comparison with the Lisbon Metropolitan Area.
4. Citizens from the most participative regions have been harmed in comparison with other regions due to the government's decision to distribute a grant to a project from every region.
5. A similar conclusion emerges from the government's decision in promoting

an equitable distribution of the prize to all areas which means that areas with significant levels of participation – v.g. Education and Adults Training – stay below fair share or receive less funds.

6. Winning projects are legally binding to society.
7. Participants have demonstrated a strong will to present projects that didn't cover the thematic scope of the competition.
8. The success of this research consists mostly in the fact that it is the first of its kind in terms of this public game – i.e. PBP – and gives guidelines for the 2nd edition or transnational initiatives.

4. Participatory Budgeting Portugal as a bottom-up instrument to redefine the EU Monetary System and Policy

Participatory budgeting first spread in Latin America during the early 1990s and then over the entire globe, hybridizing in several procedural models. Nowadays, it is assessed as a transnational legal instrument that allows the participation of non-elected citizens in the conception or allocation of public finances⁸.

At the moment, while still processing the results, the Portuguese Government has already made public a budget improvement and a scope extension to all public policies enshrined in the Portuguese Constitution for PBP's 2nd edition.

The Portuguese experience, as well as other domestic experiences, shows that this "bottom-up" approach intends to guarantee legality, accountability and the participation of citizens in the political, economic and legal process consecrated in the Portuguese

⁸ See Yves Sintomer/Carsten Herzberg/Anja Röcke in collaboration with Giovanni Allegretti, Transnational Models of Citizen Participation: The case of Participatory Budgeting in Nelson Dias (org.), Hope for Democracy, 25 years of Participatory Budgeting Worldwide, Portugal, In Loco Association, 2014, pp. 28-29.

Constitution⁹. Despite the fact that the 1st edition has brought up some limitations that have been equally reported worldwide¹⁰, the on-going process of innovation of governance leads us – like many other citizens, individually¹¹¹² or collectively¹³ – to participate in the construction of a better world, improving and strengthening consensus between citizens, governments and other international entities through Law.

The reflection paper on the future of EU Finances published on 28th June 2017¹⁴ concludes that the EU budget is about achieving the objectives set out in the treaties. On the other hand it is about a budget that provides for public goods of a European dimension single market, or helps uphold our democracy, fundamental rights and basic freedoms, the rule of Law,

⁹ See Benedict Kingsbury/Nico Krish/Richard B. Stewart, The Emergence of Global Administrative Law, Global Administrative Law Series, pp. 39-43. Available at <https://ssrn.com/abstract=692628>

¹⁰ See Brian Wampler A Guide to Participatory Budgeting, *Introduction to the Public Sector Governance and Accountability Series – Participatory Budgeting*, The World Bank, Washington DC, Library of Congress Cataloging-in-Publication Data, edited by Anwar Shah, pp. 45-47. Available: <https://siteresources.worldbank.org/PSGLP/Resources/ParticipatoryBudgeting.pdf>

¹¹ See Tatiana Sumskeya The Role of Decentralization in the Formation of the Budget System in a Federal State, *Economic Alternatives*, 2017, pp. 293-306 available at http://www.unwe.bg/uploads/Alternatives/8-Alternativi_en_2_2017.pdf

¹² See Rossitsa Toncheva, Bulgarians are on the way to Modern Barter Exchange System (MBES). An Expert Survey, Munich Personal RePEc Archive Paper No. 76284, posted 18th January 2017. Available online at <http://mpra.ub.uni-muenchen.de/76284/>

¹³ See Stéphanie Hennette/Thomas Piketty/Guillaume Sacriste/Antoine Vauchez, Pour un traité de démocratisation de l'Europe, Portuguese Version, Lisboa, Temas e Debates – Círculo de Leitores, 2017.

¹⁴ See European Commission, Reflection Paper on the Future of EU Finances, 28th of June 2017 available at https://ec.europa.eu/commission/sites/beta-political/files/reflection-paper-eu-finances_en.pdf, p. 4. where the President of the European Commission Jean-Claude Juncker states that "We need a budget to achieve our aims. The budget for us is therefore not an accounting tool, but a means to achieve our political goals".

equality, solidarity, sustainability, peace or the economic and monetary union.

As global monetary policymaking becomes extensive and demanding in its institutional forms and uncontrolled effects, it seems increasingly insufficient to theorize the State as the only possible *locus* of democracy. Citizens around the world voice dissatisfaction against the public-private enterprises that fail to perfect democratic control over the current inefficient, illogical and unfair monetary system.

It may be possible to reconsider and renew democracy in these new global conditions. The resilience showed by citizens in several European and non-European States in face of changing functional demands and understandings of democracy have evolved greatly with the consolidation of the administrative state, the entrenchment of judicial review, and the proliferation of non-electoral modes of oversight and participation.

However, the monetary problem of democracy beyond the State is more urgent and more protean than it appeared in earlier eras. Arguments for global democratic institutions, indeed for top-down global democracy in any form, are met with staunch normative and positive-political skepticism. Consequently, new avenues in promoting the bottom-up scrutiny of very specific institutional design – *v.g.* monetary system – are a fundamental human right consolidated in the principle of popular sovereignty, the reigning principle of any Democratic Rule of Law.

5. Legal reasoning for the implementation of Participatory Budgeting in monetary system design

In legal writing it is important to exhibit pristine logic into the form of a logic syllogism. A syllogism envisages a major premise, a minor premise and a conclusion. The lesson of Neal Ramee (2002) says that

a major premise usually states a general rule, a statement of law. Instead, a minor premise makes a factual assertion about a particular person, thing or group of persons or things which constitutes a statement of fact. The conclusion connects the particular statement in the minor premise with the general one in the major premise, and tells us how the general rule applies to the facts at hand. This process is called applying the law to the facts¹⁵.

5.1. Minor premises

Let's start with statements of facts. There is no shortage of factual documentation that the entire system has been designed and orchestrated by the Bank of International Settlements, despite general ignorance thereof, where the central banks of several countries together with a few private bankers have plotted the functioning of the current monetary system. This supranational organization which has never been submitted to the vote of citizens has guaranteed to some private persons – shareholders – Special Drawing Rights which can be qualified as the unit of account for the BIS and the IMF, representing a claim to currency held by IMF member countries and also creditors for which they may be exchanged. According to Article 4 of the current statutes of the Bank of International Settlements one Special Drawing Right represents the equivalent to the sum of five currencies: US\$ 0.58252, € 0.38671, Japanese Yen 11.900, Pound sterling 0.085946 and Chinese Yuan 1.0174 as approved by the Executive Board of the IMF, effective 1st October 2016, revised every five years.

Concurrently, the IMF conceived in July 1944 at the United Nations Bretton Woods Conference in New Hampshire, United

¹⁵ See Neal Ramee, 2002. Logic and Legal Reasoning: a guide for Law Students available at <http://www.unc.edu/~ramckinn/Documents/NealRameeGuide.pdf>, p. 1.

States, currently comprising 189 countries, whose founding mission is to promote international financial stability and monetary cooperation and reduce global poverty has a bilateral power of surveillance over our entire behaviour as citizens, i.e. focusing on individual member countries or multilaterally with an oversight of the global economy. This unlimited power of surveillance ultimately gives full control over countries' monetary, fiscal and regulatory policies where the sovereignty of countries and the exercise of fundamental human rights and freedoms are held hostage by creditors.

In June 2016, the research department of IMF produced a paper "Neoliberalism oversold?"¹⁶ where it is stated that neoliberal policies carried out by private creditors and irremediably supported by governments have increased inequality, jeopardizing durable expansion and concentrating in the wealthiest 1 per cent wealth equal to the rest of the planet's population combined¹⁷.

The abovementioned paper as well as some public declarations from the highest board members of the IMF proves their *mea culpa* and also their scientific incapacity to define a stable monetary policy.

To present the whole picture, authorized voices in the current fiat money cartel speculate on the incapacity that Governments and the European Central Banking face in controlling inflation which could lead to the end of an era of fiat currencies as people

lose faith in paper money¹⁸. On the other side of the roadblock, a currency board likely represents a beginning rather than an end in the evolution of monetary systems giving its economy the option to create its own European Central Bank¹⁹.

According to Hadrien Saiag the implementation of a currency board destroys in the long term the official market, develops grey economy, ruins intergenerational contracts, limits the access to finance for new business and leads to a gigantic expansion of inequality and poverty²⁰. Not to mention that there are plenty of remarkable economists that have already concluded that Central Banks²¹ as Currency Boards have been financially aided by the International Monetary Fund to benefit the IMF's own institutional interests, the failed money producer²² and therefore not sufficient to overcome the inefficiency and instability of the system²³.

Even with privileged information through surveillance mechanisms – i.e. principle of asymmetric information – the current system has shown throughout history

¹⁶ See Alfred de Zayas, Report of the Independent Expert on the promotion of a democratic and equitable International order to the United Nations General Assembly Ne A/72/187, 21st July 2017, p. 23 *apud* Jonathan Ostry, Prakash Loungani and David Furceri, "Neoliberalism: Oversold", Finance and Development, vol. 53, No. 2 (June 2016). Available at www.imf.org/external/pubs/ft/fandd/2016/06/ostry.htm

¹⁷ See Hardoon, Deborah/Ayele, Sophia/Fuentes-Nieva, Ricardo, OXFAM International, An Economy for the 1%, 210 OXFAM Briefing Paper, 2016, pp. 1-44. Available: https://d1tn3vj7xz9fdh.cloudfront.net/s3fs-public/file_attachments/bp210-economy-one-percent-tax-havens-180116-en_0.pdf

¹⁸ See Jim Reid/Craig Nicol/Nick Burns/Sukanto Chanda, Long-Term Asset Return Study: The Next Financial Crisis, 18th September 2017, pp. 2-93. Available at <http://www.tramuntalegria.com/wp-content/uploads/2017/09/Long-Term-Asset-Return-Study-The-Next-Financial-Crisis-db.pdf>

¹⁹ See Richard W. Kopcke, Currency Boards: once and future monetary regimes?, New England Economic Review, May/June 1999, pp 21-37.

²⁰ See Nikolay Nenovsky, Reflections on Currency Boards and Monetary Federalism, MRC Working Papers No 13/2017, January 2017, ISSN 2534-9465, p.10.

²¹ See Steve H. Hanke/Kurt Schuler, Currency Boards for Developing Countries: A HANDBOOK, Revisited Edition, International Center for Economic Growth, 2015.

²² See Nikolay Gertchev, The Case Against Currency Boards, The Quarterly Journal of Austrian Economics, Vol. 5, No. 4 (Winter 2002), p. 66 who quotes Nenovsky and Rizopoulos 2002 to claim that the Bulgarian Currency Board was deliberately introduced by the IMF to serve its own interests.

²³ See Nikolay Nenovsky/Evgeni Peev/Todor Yalamov, Banks-Firms Nexus under the Currency Board: Empirical Evidence from Bulgaria, William Davidson Institute Working Paper 555 in https://papers.ssrn.com/sol3/papers.cfm?abstract_id=401640, April 2003, p. 22.

systematic violation of human rights. Drazen (2002) affirms that politicians, mass media or the public have not much understanding of the long lags of monetary policy²⁴ but, that statement has no solid foundation at all. Therefore, the argument of government and people's ignorance on monetary issues is utterly pure demagoguery.

5.2. Major premises: statement of law and science

We live in an era where rapid developments in the economy and capabilities of technology and digital surveillance prompt an array of challenges to many of our most dearly held human rights.

How might we preserve privacy when governments and private creditors around the world can, and often do, inexpensively and invisibly surveil and analyze every citizen's interaction, even their address books, documents, conversations with family, friends and colleagues? What freedom of association might remain when communications and physical locations of entire populations are supervised and stored from data collected from mobile phones even when they are offline? How can fundamental human rights and freedoms persist when every time we watch several sources of information a digital record is made to be assessed by private and public agents, besides the inherent violation of other rights?

In the European Union context a number of principles are closely associated with the administrative law principles found in many of the Member States but may also be classified under the rules of natural justice.

For instance, sub-article 3 of Article 6 Treaty on European Union recognizes the rights in the EU Charter of Fundamental Rights as having the same legal status as

²⁴ See Allan Drazen, Central Bank Independence, Democracy, and Dollarization, Journal of Applied Economics, Vol. V, No. 1 (May 2002), p. 5.

the Treaties, although the Charter itself is not contained within the Treaties but is referred to in Declaration 1 attached to the Treaties. This means also, according to sub-article 2 of Article 6 of the abovementioned Treaty, that the Union shall accede to the European Charter of Human Rights and declares in any event that those rights contained in the ECHR shall constitute general principles of the Union's law.

Additionally, Article 220 of the Treaty on the Functioning of the European Union requires the Union to maintain appropriate relations with international organizations such as the United Nations, the Council of Europe and the OECD. Thus, the European Union must cooperate with Member States because the subject matters of the agreements often straddle matters coming both within and outside Union competence. However, even agreements and international agreements entered by the Member States alone can bind the Union²⁵.

Therefore, no international financial institution or agreement is above international human rights law, which means the prevalence of the Universal Declaration of Human Rights in case of any positive conflict between laws. Ultimately in the World Economic and Social Survey 2017 the following is emphasized: *"The implementation of an ambitious agenda for sustainable development requires both greater policy space for countries so that they can determine the policies that best reflect their own national context and sufficient flexibility in order to ensure an orderly recover from situations of economic stress, as aimed for in target 17.15 under Sustainable Development Goal 17."*²⁶

²⁵ See Nigel Foster, EU Law - Directions, 2nd edition, New York, Oxford University Press, 2010, pp. 106-112.

²⁶ See Alfred de Zayas, Report of the Independent Expert on the promotion of a democratic and equitable International order to the United Nations General Assembly № A/72/187, 21st July 2017, p. 26.

In parallel science has also played a vital role in cleansing the mind from primitive notions like commodity money, fiat money or managed money. From State Theory of Money to Modern Theory of Money several scientific and logical assertions have been produced:

- a) *Money is a social record-keeping device that measures value;*
- b) Money, as an instrument of information, is an output and not an input to value creation;
- c) The Stable Unit Currency Theorem from Marc Gauvin and Sergio Dominguez states that “ *If every Transaction is Passive BIBO Stable and all money created is necessarily a product of such Stable Transactions, then, all such units will necessarily maintain a Bounded ratio with all system inputs to those Transactions and therefore the units also will be stable by definition*” proving the unit cost destabilization and consequently the instability of the current monetary system;
- d) *Money cannot be used both as a measure and a commodity, since a record of measuring value can only represent the value of something else while a commodity can only represent its own value*²⁷;

²⁷ For paragraphs a) to d) See Jorge Meira Costa/ Marc Gauvin McNeill, A Proposal For Harmonising Current Disparate (Scientific and Legal) Definitions of Money Towards Greater Decidability in the Provision of Justice According to Universal Principals of Law, Monetary and Economic Research Center, 1st Annual Conference, Monetary Policies in the Balkan Region. The Future of the Euro and Eurozone in the Balkans, Sofia, Monetary Research Center, 2015, pp. 90-110 apud Marc Gauvin, Sergio Dominguez, The Stable Currency Unit Theorem available at <http://bibocurrency.com/index.php/full-intro-2#SCUT> ; Marc Gauvin, Sergio Dominguez, Passive Bibo Currency Distinguish Claims available at <http://bibocurrency.com/index.php/downloads-2/14-english-root/105-passive-bibo-currency-distinguishing-claims>; Marc Gauvin, The Money Psyop, Alicante, Quinta Impresión, S.L., 2012. Available at http://www.mrcenter.info/Doc/ConferencePapers/2015/MRC_2015_Gauvin_Meira_Final_Release_Amendment_for_Publication.pdf

- e) *There is no natural limit to a sovereign government's ability to store information regarding the measure of value of goods and services;*
- f) *The main problem with excessive spending by the State is inflation, not risk of default and insolvency*²⁸;
- g) *To establish a meaningful connection between market and prices, monetary velocity in its present interpretation is not useful but misleading*²⁹.

5.3. Conclusion

Starting from the idea of Nadeem Akhtaar, Yann Le Guyadec and Flavio Oquendo³⁰ there is scientific foundation to implement a formal and innovative approach to money to give legal effect and redefine the current monetary system, establishing through Participatory Budgeting the meta-norm of procedural integrity axed on (i) the source, respectability and authority of the norm creating citizen body; (ii) the transparency, openness and neutrality in the norm's procedural elaboration – i.e. requirement specifications constituting organizational abstractions, organizational rules, role model specifications, protocol definitions followed by the architecture specifications formed by constructs for specifying static as well as dynamic architecture – (iii) the substantive quality, consistency and overall acceptance

²⁸ See L. Randall Wray, 2014. „From the State Theory of Money to Modern Money Theory: An Alternative to Economic Orthodoxy,” Economics Working Paper Archive wp_792, Levy Economics Institute, available at http://www.levyinstitute.org/pubs/wp_792.pdf , pp. 29-31.

²⁹ See Jens Martignoni, Monetary Velocity in a Systemic Perspective: an approach towards more accurate currency thinking, *Economic Alternatives*, Issue 4, pp. 433-446, available at http://www.unwe.bg/uploads/Alternatives/J_M_2016_Issue4_en-4.pdf

³⁰ See Nadeem Akhtaar/Yann Le Guyadec/Flavio Oquendo, Formal requirement and architecture specifications of a multi-agent robotic system, *Journal of Computing*, Volume 4, Issue 4, April, 2012, ISSN 2151-9617, p. 5.

(consensus) for the entire discipline of International Monetary Law³¹.

One of the most challenging tasks in specification engineering for a multi-agent technological monetary system is to formally specify and architect its components, especially because a multi-agent system is concurrent having concurrent processing, and often having dynamic environments. In this respect we have to appreciate the best efforts of the Scientific Community – *v.g.* Marc Gauvin³², Hicham M. Hachem³³ *et. al.* – in the investigation and combination of regular expressions, first-order predicate logic to define monetary requirements specifications, calculus based technological platform to define the dynamic architecture specifications.

There will be no legitimacy risk for any European Government when collective intelligence, applying formal requirements, decidable ontology and dynamics system tests, substitutes government's decision-making power if any legislative procedure ends with a popular voting phase that is binding. Article 21 of the Universal Declaration of Human Rights as well as Article 25 of the International Covenant on Civil and Political Rights substantiate our argument as it consecrates the right of every citizen to take directly part in the Government of his country.

These rules ensue from the European Union jurisdiction as the concept of European citizenship based on the principles of liberty,

³¹ See Joost Pauwelyn/Ramses A. Wessel/Jan Wouters, *When Structures Become Shackles: Stagnation and Dynamics in International Law Making*, *The European Journal of International Law*, Vol. 25 no. 3, pp. 762-763.

³² A special mention to the pioneer projects of Marc Gauvin *et. al.* *Passive BIBO Currency – Stable Liquidity for the 21st Century* available at <http://www.bibocurrency.com/> and *Money Systems Transparency Alliance* available at <https://www.moneytransparency.com/>

³³ See Hicham M. Hachem, *Innovation, dynamics and the myths about knowledge, technology and R&D-driven economic growth: an evolving network model*, *Journal of Innovation Economics & Management* 2017/2 (Nº 23), pp. 13-32.

security and justice puts the human being in the center of the action. Consequently, the construction of a scientific legal concept of money – *i.e.* formal, technical and logical – is the precondition that envisages the design of a European Monetary Rule of Law evolved into the rule of Science where principles and laws are mutually consistent, striving for the unity of the process of full compliance of fundamental human rights and freedoms.

6. Final Reflections

As Currency Boards were an invention of the British Empire implemented by Law³⁴ the same can happen with the European creation of Participatory Budgeting (PB) towards the redesign of the monetary system and policy.

Participatory Budgeting possesses a unique status that has been widely implemented and whose original design is self-consciously and behavior aimed at the kind of social transformation that enhances real innovative thinking. A set of concerted rules and principles that enables the formation of typical decision models, assuming internal systemic qualities, presenting a richness that overcomes the sum of the parts, is mandatory to become a scientific instrument put at the service of social and economic relations and dogmatic approach to Law.

We personally support monetary federalism and the common objective that the Euro needs to strengthen its role as a source of shared prosperity, economic and social welfare³⁵.

For every reason that has been stated above, the Participatory Budgeting has the capacity to function as a transitional and

³⁴ See John Williamson, *What Role for Currency Boards?*, Peterson Institute for International Economics, pp. 5-6.

³⁵ See European Commission, *The Reflection Paper on the Deepening of the Economic and Monetary Union May 31st*, pp. 1-39. Available at https://ec.europa.eu/commission/sites/beta-political/files/reflection-paper-emu_en.pdf

transformative constitutional mechanism to change the current monetary system.

Through the allocation of the current and erroneous concept of public money, citizens have the opportunity to establish a transformative dialogue and settle consensus through a multidisciplinary process of transforming the social memory representation of goods and services to a data format suitable for storage and transmission between different parties.

The Rule of Science must be the Rule of Law founded in scientific principles to system concepts, design principles collected from maturing specialized disciplines and metaphysical tenets in the general systems worldview, formulating principles by generalizing from system Laws, assembling system definitions and convergently developing the criteria that must be jointly satisfied by the system "image"³⁶.

The paper has the potential to inform and influence opinion leaders, think tankers but most importantly citizens to establish a new economic thinking. By using the very practical procedure of Participatory Budgeting the new set of normative system design must be enshrined as formal constitutional rules in the Treaty on the Functioning of the European Union.

Open questions may remain in terms of procedural ruling of Participatory Budgeting regarding monetary system design. However, this mechanism can be a groundbreaking help for citizens to decide afterwards which resources will be used in its economy, price stability formation and development that will influence macroeconomic policy, foster efficient and stable exchanges, the movement of factors of production, encouraging all members to adjust more rapidly to changing economic conditions.

³⁶ See David Rousseau, *Systems Research and the Quest for Scientific Systems Principles*, published in www.mdpi.com/journals/systems, March 2017, p. 13.

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