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Towards a Topology of Monetary Systems

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Abstract

In a world facing complex social and environmental challenges, innovative approaches to monetary systems are essential. Our group, motivated by a concern for both society and ecology, developed the concept of "monetary topology" to evaluate and compare various monetary systems. This framework focuses on six key themes: legislator, institution, emission rules, conditionality of uses, coinage rules, and the system's operating properties, along with its societal and ecological consequences. Each theme contains objective evaluation characteristics, offering a detailed analysis of any monetary proposal. Monetary topology provides a holistic approach, evaluating the entire structure and impact of a monetary system. It allows for systematic comparison, identifying strengths, weaknesses, and areas of applicability across different systems. This approach helps policymakers, economists, and community leaders make informed decisions that align with societal and ecological goals. The tool we designed is structured around these six domains, with each characteristic assessed from monetary, social, and ecological perspectives. This multidimensional framework delivers a comprehensive assessment of each system, providing a functional method for describing and comparing monetary systems, answering critical questions such as who controls the system, how it operates, and its purpose. Aligned with the principles of RAMICS, our group aims to explore innovative monetary solutions that address pressing societal and environmental issues. Monetary topology is a powerful tool in this endeavor, providing a structured framework for evaluating, understanding, and improving monetary systems. In conclusion, monetary topology offers a fresh, comprehensive way to assess monetary systems, enabling us to transcend traditional boundaries and design systems that better serve both communities and the planet.

Keywords

Monetary system topology; monetary system analysis; classification of monetary system.

JEL codes

E42; E12; E51; E14.

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1. Introduction

Research in the monetary field suffers from isolation, lack of media coverage, debate, and connections. There is no shortage of innovative initiatives and ideas, but the landscape remains fragmented due to the absence of an overall view or synthesis. The media hesitate to publish articles that are not commercially viable or are too critical of the current system, and many economists lose interest in monetary issues or merely continue to repeat the same unproven claims about the neutrality of money or its quantitative theory. As a result, in the absence of public debate on the subject, the current monetary system, inspired by monetarism and established in a neoliberal context, presents itself as legitimate and

unquestionable. It is displayed as a universal law or a genuinely natural phenomenon, denying the political nature of its construction. Although a fundamental institution in all human societies and, as such, a political object, the current monetary system, characteristic of the liberal capitalist order, is naturalized and presented in the same way as air and water. Consequently, it is all too rarely a topic of discussion. Thus, the solutions often considered for solving our societal problems are thought of within the framework offered by the current monetary system, when they can only be found outside or in addition to it. Empowering and giving visibility to monetary alternatives is essential for a real societal debate to exist. What will eventually emerge is likely not the implementation of just one of the proposals being debated, but rather one or more new proposals that will have built their architecture in light of those growing in the shadow of the dominant system—proposals that must be compared, refined, and made more widely known.

This is the ambition of the analytical framework and working method we present below, in the hope that the valuation system that characterizes them helps civil society make its choices and encourages and assists monetary project leaders to improve their proposals or cooperate for the common good. The emulation thus created should bring initiatives closer together and promote more collective work. These are the reasons why we believe that such a working method and such a reference tool are absolutely necessary.

The analytical framework we propose would highlight the commonalities and differences between the euro, the *wir*, the shekel, the ancient Greek drachma, central bank digital currencies (CBDCs), or local currencies, for example. To be considered a currency, certain essential characteristics must be met. Which ones? Because not all currencies serve the same objectives, they are not organized in the same way, not all are issued by the same institutions or based on the same criteria, and not all present themselves in the same manner. The objectives of a Roman Emperor issuing coins to pay his army are quite different from those of modern central banks issuing central money, whose official objective is to control inflation. Therefore, it is the organization of the monetary system, the objectives pursued, the rules of operation, and the rules of issuance that characterize each currency, each monetary system.

Beyond a simple description of the characteristics and functioning of currencies, it is essential to ask about their consequences. What are the advantages and disadvantages of the various forms of money? This is a vast question that the vast majority of citizens would struggle to answer due to a lack of sufficient knowledge on the subject, thus leaving it to the 'specialists' to answer on their behalf. Worse still: the idea that a single form of money has 'spontaneously' imposed itself is so ingrained that citizens do not even question its effects or consider other possible paths. Is the dominant monetary monoculture system serving the common good, social cohesion, respect for human rights, and nature? There is no doubt—it must be questioned!

Thus, in order to compare monetary systems, we believe it is essential to have a descriptive and analytical framework that covers all dimensions of any monetary system. This descriptive framework should rely on a tool that allows for the objective description of any monetary system in all its characteristics. This tool should enable the recording of all constitutive elements and characteristics of a monetary system, regardless of its objectives

(sovereign, for-profit, or non-profit). Based on these analytical descriptions and the recording of values for each characteristic of monetary systems, complete comparative analyses could be conducted, enabling citizens—based on a rigorous method—to take ownership of the monetary issue.

Our objective is therefore not to provide answers for the citizens but to offer an analytical grid, a systematic descriptive framework that allows for the classification, comparison, and evaluation of monetary systems in such a way that civil society can take up these questions and assess the relevance of any monetary reform proposal for itself.

With this project, we are not heading towards a typology of monetary systems that groups them into families or types (even 'ideal' types) according to one or more criteria, but rather towards defining a standardized framework for describing monetary systems. To facilitate these comparisons, we have developed graphical visualization tools that highlight the differences between the monetary systems analyzed. That is why we prefer to speak of monetary topology rather than monetary typology. The visual graphs allow us to see the positioning of each monetary system relative to others. It is through the superposition and comparison of the graphs associated with each monetary system that one can gain a complete and synthetic understanding of each monetary system or each monetary proposal, based on a structured reference framework of themes and characteristics that include elements evaluated along three axes: an economic axis, an ecological axis, and a social axis.

2. The Typologies of Monetary Systems

Economics does not aim to describe what money is or to delve into its essence. It presents its role abstractly, refusing to describe its real characteristics. The instrumental and technocratic approach adopted by central banks, which describe money as a "monetary instrument," tends to sanitize the monetary debate and obscure its political implications. Of course, the functional approach to money, seen as a means of payment, store of value, and unit of account, remains absolutely fundamental. But it is not enough. There is abundant literature that attempts to highlight the fundamentals of money. To enrich our reflection in the development of our analytical framework, we have drawn from two main types of contributions to monetary reflections. The first, from the institutionalist approach to money (M. Aglietta, A. Orléan), is sociological and anthropological (M. Mauss, D. Graeber). The second offers classifications or typologies of monetary regimes (Boyer-Xambeu, Deleplace, Gillard, Lietaer, Blanc, Martignoni, Tichit, etc.). All of these contributions have served as sources of inspiration in establishing an inventory of the characteristics of monetary systems and grouping these characteristics into general themes.

Boyer-Xambeu and al. (1999) provide elements of an institutionalist definition of money. They define concepts such as the monetary economy¹, unit of account², and the instrument of payment³ conceived as a stable equality between the unit of account and the unit of this instrument, the monetary regime, and the minting regime⁴. Their work primarily focuses on the analysis of international currency exchanges and the exchange between metallic money and the substitute money represented by the bill of exchange. Boyer-Xambeu and al. (1999) contribute to an institutionalist viewpoint that allows for a structured description of monetary regimes by distinguishing the major components of any monetary regime, as we do more in detail through a series of thematic groupings subdivided into characteristics.

Pineault (1999) develops a sociological typology of the historical forms of the relationship between politics and monetary regulation. He differentiates monetary regulation forms based on the nature of the state's relationship with money. First, he identifies an immediate and authoritarian form in traditional societies where the legitimacy of political authority derives from a transcendental reference, such as the divine right of kings. He then identifies a mediated "institutional and political" form in modern societies, where monetary institutions become economic institutions. His typology focuses solely on this differentiation based on political regulation.

Lietaer and Kennedy (2008) sketch a typology of currencies, aiming to be as exhaustive as possible to help citizens navigate the multitude of current monetary innovations and highlight what distinguishes or unites different types of money. In this sense, our approach is aligned with their objective, though the methods differ. Their typology is based on five major characteristics of money: its objective, form, function, how it is created, and its funding method. Each of these characteristics can take on a limited number of values (which we refer to as "elements" in our analytical framework).

The objectives of money can be:

¹ "An economy with money can be understood as a set of contractual relationships between agents, in which the unit of measurement for contracts is singular. It is the uniqueness (as opposed to the plurality) of this unit of measurement that distinguishes a monetary economy from a non-monetary economy; this is referred to as the unit of account." (p. 32)

² "In a monetary economy defined this way, the price is a quantity measured in the unit of account, i.e., a specific number of that unit. The unit of account is thus a prerequisite for the existence of any relationship between agents." p32

³ "Payment requires an instrument, which is defined as an equivalence between one unit of this instrument and a value in the unit of account. This exchange rate allows it to circulate within the economy, i.e., to be used within this payment community." (p. 33)

⁴ "A monetary regime is a set of coordinated official rules for accounting and payment that private agents must adhere to in their interactions. A coinage regime refers to a specific procedure whereby, in a relationship between private agents and the institution issuing the currency, the currency enters circulation as regulated by a monetary regime. Thus, the monetary regime defines the nature of relations between private agents, while the coinage regime defines the relations between private agents and the public institution issuing the currency. One necessarily corresponds to the other, as the use of currency in relations between private agents requires its creation outside of those relations." (p. 34)

- Money as legal tender
- Money aimed at facilitating commercial relations (B2B, B2C, C2C, C2B)
- Money with a social purpose

The forms of money can be:

- Commodity money
- Paper money or coins
- Electronic money
- Combined forms

The functions of money can be:

- Money as a generally accepted means of payment
- Money as a unit of account
- Money as a medium of exchange
- Money as a store of value

How money is created:

- Money with guaranteed convertibility
- Money created from an unsecured loan
- Money that can be bought and exchanged
- Mutual credit money
- Money created by a central unit and given

Blanc (2011) focuses on complementary, non-sovereign, and non-profit currencies. He draws a sharp distinction between profit-driven currencies and those motivated by other goals. Referring to his work within the "Social Money Workshop Facilitation Committee," integrated into the workgroup on solidarity socioeconomic, he opens the debate on what a typology devoted to money should be. For him, a typology cannot be a closed system of classification of observations but must remain open. A typology cannot exclude any other typology based on different criteria aiming to shed light on the monetary phenomenon from a particular viewpoint. Every typology must be subject to ongoing discussion and transformation with new contributions. He highlights the difficulty of establishing a single typology accepted by academics, activists, and external observers.

Focusing on complementary currencies aligned with an ideal of democratic organization, he presents a two-tiered typology. The first level is based on a grouping centered on the monetary project, which can be defined as the general philosophy and main objectives of the project, what guides the monetary project, and what sets its general orientations and values. He differentiates three main types of projects: the territorial project focused on a geopolitical

space, the community project centered on a particular community, and the economic project focused on production and exchange. He then refines his typology by adding the nature of the project's designer, which could be political authorities with a political motive, profit-seeking companies, or non-profit organizations (NPOs). The second level, specific to local, social, or complementary currencies, relates to the historical development of these types of money.

Martignoni (2012) agrees that attempts at classification or typologization are rare, unfruitful, and generally based on criteria such as the economic functions of money or its material aspect. He cites the typology of the German association of regional currencies, which considers the backing technique used as a key criterion for classification. According to the association, complementary currency must be backed either by the euro or by a service rendered within a recognized exchange circle. He also cites the matrix documenting the properties of monetary systems created by the Unterguggenberger Institute Wörgl (<https://unterguggenberger.org/>). This matrix, based on eight criteria, can serve as a decision aid in monetary matters. Martignoni (2012) then proposes his own typology based on the work of Greco (2009). He distinguishes four principles:

1. Who is qualified to issue money? The answer is a continuum of possibilities ranging from "anyone can issue money" to "only the central authority can issue money."
2. What is the basis for money issuance? Again, the answer takes the form of a continuum from "it is the quality/trust in the borrower that is the basis" to "the value of another pledged currency."
3. How much money can the issuer put into circulation? According to him, the quantity of money issued should be a function of the ability to provide goods and services allowing for repayment within the considered time frame.
4. What are the objectives of money? The answer ranges from "individual interests" to "the general interest."

Based on these principles, he assigns weights to each answer, allowing each monetary system to be placed on two-dimensional graphs divided into quadrants. The position of a monetary proposal within one of the quadrants characterizes the proposal, and multiplying the two-dimensional graphs refines the characterization.

Figure 5 : Basic currency concepts : diagram of the quadrants

| | | | |
|------------------|------|---|--|
| Basis of trust | 5 | Quadrant II Service-oriented | Quadrant IV Community-oriented |
| | 2.75 | Quadrant I Enforcement-oriented | Quadrant II Security-oriented |
| | 1 | 2.75 | 5 |
| Currency purpose | | | |

In addition to graphical descriptions, there is also a textual description of the money. For example, for the chiemgauer...

3.2 Chiemgau Voluntary Association

| | |
|--------------|--|
| Organisation | Chiemgau Voluntary Association, Rosenheim, Germany www.chiemgauer.eu |
| Currency | Chiemgauer, 1 Chiemgauer equals 1 € |
| Members | 2,686 |
| Turnover | 4,019,513 Chiemgau / year |
| Origin | Founded in 2002, first issue of Chiemgauer 30.1.2003. Originated as a student project at the Free Waldorf school, Prien am Chiemsee. |
| Purpose | Construction of regional economic cycles, promoting the common good |
| Trust | Euro backed voucher system, € 100% deposited in bank accounts. |
| Creation | Chiemgau vouchers bought with €. Also electronic Chiemgauers in cooperation with regional banks. Also recently credit creation facilities in the context of the German micro-credit decree and backed by the German Microfinance Institute. |
| Circulation | Quarterly 2% fee. With additional redemption fee in €. Support for non-profit organizations. This can be directly specified by consumers / users and receives 3% of turnover. |
| Comments | Largest regional currency system and model for most other regional currencies in Germany. The organization has just been restructured. An additional organization, the Regios co-operative was also founded, primarily as an operating company supporting the electronic version of the Chiemgau and the specially developed billing system. |

Blanc (2013) continues the investigations begun in his 2011 article. Following Polanyi, he distinguishes between all-purpose money and special-purpose money. For the latter, he asserts that the validity of special-purpose currencies is modulated by five criteria:

1. Temporal (the time horizon of usage),
2. Territorial (spatial limits of usage),
3. Economic (the range of goods and services covered),
4. Social (groups of people using the currency), and
5. Legal (regulatory limitations on usage, potentially overlapping the previous four but also extending beyond them, such as caps on the legal tender power of coins or bills)⁵.

⁵ Blanc, J. (2013), p. 251

He then constructs "ideal types" (in the Weberian sense) — abstract, utopian, and exemplary constructions intended to bring together under a coherent form an array of traits not necessarily observed as such in reality. These ideal types are mobilized to improve understanding of reality and study variants, evolutions, contradictions, etc⁶. He distinguishes three types of money:

1. The "public money" type, linked to a logic of power and sovereignty via a fiscal circuit. He subdivides this into state money and sub-state money.
2. The "profitable money" type, referring to money issued for the benefit it brings to the issuing organization through its issuance and management. He distinguishes banking profitable money from captive profitable money.
3. The "citizen money" type, which refers to the construction of mechanisms by groups of people for collective utility purposes, with or without links to public authorities and with or without convertibility or even commensurability with public state money. He distinguishes community citizen money based on reciprocity in a closed system without convertibility or commensurability with public money from commercial citizen money with economic objectives aimed at stimulating a specific sector of production and distribution of goods and services by collectively organized actors.

Thus, there are three ideal types divided into six subtypes:

1. Public money, subdivided into state and sub-state money
2. Profitable money, subdivided into banking and captive money
3. Citizen money, subdivided into community and commercial money

Tichit and al. (2016) highlight a certain vanity in attempts at classification or typologization. "On this point, Blanc (2013) acknowledges the relative failure of the literature to define a clear-cut typology of complementary currencies, and we believe that following the current trend of increasing classification criteria will only worsen this failure to find a useful classification system." They then propose focusing on two questions that address a meta-description of monetary systems:

1. What are the elements that authors should concentrate on, and why?
2. How are databases on complementary currencies compiled?

⁶ Blanc, J. (2013), p.247

In reality, they call for identifying standardized characteristics of monetary systems and organizing these characteristics into a database. They do not want to rely on a pre-established typology and then classify the various currencies they study within it. Instead, they propose creating a classification based on a bottom-up, *a posteriori* mechanism, rather than relying on predefined (*a priori*) criteria, categories, or types.

This bottom-up approach turns out to be a statistical analysis of the textual data available on the web regarding complementary currencies. In conclusion, they produce a two-dimensional chart, with the criteria being the goals/values of the monetary project on one hand, and the dependence on sovereign currency on the other (see table below).

Classification of non-bank currencies

| | | Goals/values | |
|------------|------------------------------------|--|--|
| | | Profit / commercial value | Non profit / social value |
| Dependency | Dependant on standard currency | National and supranational currencies | Complementary local currencies, citizens' currencies, social currencies |
| | Independant from standard currency | Transaction currencies like bitcoin, crypto-currencies | LETS, barter clubs, accorderies, Reciprocal Exchange of Knowledge Networks |

This bottom-up approach influenced our view of what the analytical framework of monetary systems should be: not a categorization established *a priori*, but groupings established *a posteriori* based on shared characteristics between monetary systems.

Dissaux and Fare (2019) distinguish three forms of currency: currency as a market product, currency as a state product, and currency as a social institution admitting multiple forms (monetary plurality and diversity). They then explore the concept of currency considered as a common good and the question of monetary plurality without delving further into typologization issues.

In conclusion, as noted by various authors, including Martignoni (2012), Tichit and al. (2016), and Dissaux and Fare (2019), attempts to typologize monetary systems have been largely inconclusive. The proposed typologies are based on too few criteria to account for the complexity of monetary systems. Using just one or two classification criteria significantly limits the relevance of such classification. The complexity of monetary institutions cannot be reduced to one or two dimensions, and multiplying the criteria to create classifications with many dimensions could quickly lead to a maze of overlapping categories and subcategories.

To overcome this difficulty, Blanc (2011) pointed out that multiple typologies should be developed based on different researchers' perspectives and kept open-ended. In any case, it

does not seem either possible or appropriate to establish a universal typology that would be useful to all.

There is, therefore, no definitive classification or typologization of monetary systems. Does this mean we should abandon all attempts at classification or typologization? In other words, should we give up on the possibility of adopting a scientific mode of knowledge about monetary systems because the number of dimensions, characteristics, or descriptors of these systems is too great? Should we abandon our attempt to understand humanity simply because the descriptors of human beings are numerous and complex? Of course not! Martignoni (2012) and Tichit and al. (2016) offer inspiring approaches that, starting from basic characteristics, manage to establish broader categories. Similarly, attempts at typologization reveal relevant dimensions of analysis.

These approaches have formed the foundation of our analysis grid, which aspires to be universal, covering all monetary systems, providing an overview and allowing for detailed comparisons. This grid contains an inventory as exhaustive as possible (but necessarily incomplete) of the characteristics of monetary systems, divided into elements specific to each monetary offer. Based on the values of each element, it becomes possible to compare monetary systems. We are not seeking to establish a pre-defined typology of monetary systems, but rather a list of characteristics with varying values, with the aim of establishing a topological map of monetary systems *a posteriori*. This topology includes textual descriptions, tables, and charts showing the relative positions of monetary systems with respect to each other. These charts aim to highlight the commonalities and differences between the systems. At this stage of our work, neither the analytical framework nor the calculation method is fully finalized, but we present here the current state of progress.

3. The Analytical Framework

Starting from the idea that any monetary theory, proposition, or system must absolutely address a certain number of questions (which we call characteristics), even implicitly, before being able to offer a coherent solution, we adopted a classic hierarchical classification approach, starting with general categories that we named "Themes." Each monetary system must necessarily address each theme to be complete and viable (except for the theme of generalities and the theme of expected/observed consequences). We defined the following themes:

- 0 - Generalities
- 1 - The Legislator
- 2 - The Monetary Institution
- 3 - Rules of Issuance/Redemption
- 4 - Rules of Use
- 5 - Coinage
- 6 - Operation
- 7 - Expected/Observed Consequences

We can note that, apart from theme 0 (generalities) and theme 7 (consequences), which describe both the state of the real project and the underlying theories, themes 1 to 6 are organized in an order moving from the most conceptual to the most material, from conception to implementation. Theme 1 concerns the legislator who initiates the project, while theme 6 covers the actual operation of the monetary project, being the culmination of the proposed monetary system.

Next, we defined within each theme the characteristics that differentiate monetary proposals from one another. For example, concerning the theme of the legislator, the characteristics we highlight are its legal form, governance structure, declared⁷ objectives, type of legitimacy, and type of trust invoked. We then materialized these characteristics through specific choices. For example, regarding the legal form of the legislator, we highlight that it can be a public authority, supranational, national, regional, local, a nonprofit association, a business, a group of businesses, etc.

This gives us the following hierarchical breakdown:

- **Themes**
 - Characteristics
 - *Elements*

Here is the detailed list of themes and their characteristics (see Appendix I and II for the complete list of elements):

- 1 - Legislator
 - 1-1 - Legislator
 - 1-2 - Governance
 - 1-3 - General Objectives
 - 1-4 - Objectives of Monetary Creation
 - 1-5 - Legitimacy
 - 1-6 - Trust Attributes
- 2 - Monetary Institution
 - 2-1 - Legal Form
 - 2-2 - Centralization
 - 2-3 - Financial Interest
 - 2-4 - Governance
 - 2-5 - Trust Arguments
- 3 - Issuance / Redemption Rules
 - 3-1 - Issuance Modalities
 - 3-2 - Issuance Conditions
 - 3-3 - Targeting Tool
 - 3-4 - Initial Beneficiary

⁷ which are not necessarily the ones pursued in practice. For example, the ECB states that its mission is to defeat inflation, but in reality, its goal is to maintain inflation around 2%.

- 3-5 - Initial Issuance Modalities
- 3-6 - Monetary Sovereignty / Dependency
- 3-7 - Type of Coverage
- 3-8 - Monetary Function
- 3-9 - Main Financing Function
- 3-10 - Monetary Destruction
- 3-11 - Trust
- 3-12 - Position in the Monetary Hierarchy
- 4 - Usage Rules
 - 4-1 - Usage Conditions
 - 4-2 - Convertibility
 - 4-3 - Extrinsic Valuation
 - 4-4 - Spatial Restriction
 - 4-5 - Temporal Restriction
 - 4-6 - Social Restriction
 - 4-7 - Anonymity in Holding (outside the account holder)
 - 4-8 - Transaction Anonymity
 - 4-9 - Creditor Interest
 - 4-10 - Transaction Conditions
- 5 - Coinage
 - 5-1 - Material Support
 - 5-2 - Type of Certification
 - 5-3 - Legal Form of Certifier
 - 5-4 - Methodical Trust Attribute
 - 5-5 - Intrinsic Valuation
 - 5-6 - Storage and Holding
 - 5-7 - Technological Supports for Transactions
 - 5-8 - Guarantee of Transaction Anonymity
 - 5-9 - Guarantee of Transaction Finality
 - 5-10 - Inflation / Deflation
- 6 - Operation
 - 6-1 - Cost of the Payment System
 - 6-2 - Direct Energy Impact
 - 6-3 - Circulation Speed
 - 6-4 - Nature of Volume
 - 6-5 - Volume Evaluation Method
 - 6-6 - Volume Evaluation
 - 6-7 - Trust
 - 6-8 - Valuation

From our point of view, aligning with the observations of our predecessors on the impossibility of exhaustiveness, this list of characteristics is open and can evolve and be enriched by various contributions and new perspectives. It is, therefore, an evolving model.

The characteristics of each monetary system are described using choices from coded lists and with textual elements.

In order to facilitate quick comparison of monetary systems, we have implemented a numerical procedure that requires an evaluation of the project's impact along three axes: the economic axis, the ecological axis, and the social axis. Each element of each characteristic must be rated on a scale from 0 (no impact) to 9 (maximum impact on this axis). This rating allows for comparing projects on a common basis, knowing that the scoring is inherently subjective. The interest lies not so much in the score itself but in the comparison of evaluations between different projects.

4. The analysis tool and calculation method

Based on this foundation, we undertook the creation of a computer tool — a monetary comparator — built upon a database containing the complete description of the analyzed monetary systems.

The tool and calculation method are not fully finalized yet. It is currently available on our research website for econologists (https://econologistes.org/money_comparator/).

It offers the following features:

- A function for recording the characteristics of monetary systems based on predefined codes and associated free-text descriptions.
- A consultation function.
- A numerical comparison function.
- A graphical comparison function.
- A function for reviewing and suggesting modifications to characteristics, elements, and ratings.
- A revision function (called "characteristics review").
- An administration interface.

A review of the characteristics involves going over each element that constitutes a characteristic. This review allows:

- Checking that no element is missing within a characteristic.
- Correcting any errors in the description of elements.
- Verifying the assignment of points (methodology described later).
- Ensuring the coherence of point allocation and the associated justification.
- Making any kind of additional proposals.

The monetary comparator is intended to evolve over time with peer reviews of the various elements, as well as the evaluation of each characteristic. It is, therefore, a collaborative and participatory project aimed at refining the various ratings over time. Any registered user can review the characteristics and propose modifications (adding elements, changing ratings, etc.) to the existing analytical model. The user who submitted a studied monetary system can also complete each characteristic based on the specificities of their proposal.

Since the monetary comparator is created and deployed online, users are invited to input the monetary systems they are working on voluntarily. Each project leader provides a textual description of their project and answers the multiple-choice questionnaire, which then allows for the actual evaluation..

4.1. The monetary comparator

Regarding the establishment of ratings for the different choices, we have set a rating scale from 0 to 9 points for each element to be distributed according to the three axes. To establish the ratings, we asked several questions for each element:

- 1. **Evaluation of the current line according to the three axes:** Does this element theoretically favor the economy, ecology, or social aspects more?
- 2. **Comparison of this line with other elements** that make up the same characteristic: Does this element favor the economy, ecology, or social aspects more compared to other elements of the same characteristic? (to discriminate between elements)
- 3. **Ordering/ranking of each element** in relation to others: What is the relationship between the different elements (for example, ranking the most impactful choice to the least impactful for each of the three axes: economic, ecological, and social).

This method allows us to assign an initial rating, which is necessarily subjective, as a reference base that can evolve over time based on various modifications made during the reviews of characteristics.

The example below presents a review of the characteristics for theme 1: Legislator and characteristic 1.1 - legislator (which defines the type of legislator).

The table below presents a characteristic and the elements that compose it. It follows with the allocation of evaluations across the three axes and the justification for the points assigned to each axis. The sum of the points assigned to each axis, from zero to nine, must equal the maximum allowed for the element, which is nine, except in cases of choices on a Likert scale where the number of points equals the sum of the checked options. A textual justification area is provided for each element to document the rating assigned by the authors.

| Theme | Characteristics | Element |  |  |  | Textual justification |
|--|---------------------------|--|---|--|---|---|
| Le Législateur | | | | | | |
|  - 1 | 1 - Le législateur | 1 - Groupement d'entreprises à but lucratif | 8 | 0 | 1 | favorise l'économique |
| | | 2 - Entreprise individuelle à but lucratif | 7 | 0 | 2 | favorise l'économique |
| | | 3 - Autorité publiques d'une association de Pays / Organisation supranationale | 5 | 1 | 3 | devrait en théorie favoriser le social |
| | | 4 - Autorité publique d'un pays | 4 | 2 | 3 | en théorie social, en réalité plus économique |
| | | 5 - Autorité publique locale ou régionale | 3 | 3 | 3 | Devrait être neutre |
| | | 6 - Association citoyenne local : association formelle | 1 | 4 | 4 | favorise le bien vivre donc plus social ou écologique |
| | | 7 - Groupement d'être humains hyperlocal : association de fait, Université... | 1 | 4 | 4 | favorise le social et/ou l'écologique |



Rating from the economic perspective



Rating from the ecological perspective



Rating from the social perspective

4.2. The calculation method

The calculation method used for the result tables and graphs is as follows:

For a given characteristic:

- Some elements allow for multiple choices,
- Others only allow the selection of a single choice.

The calculation methodology for establishing overall ratings is presented as follows:

Let

- **Pt**: Points assigned to a selected choice
- **Note**: Rating for a characteristic in percentage
- **NoteTheme**: Rating for a theme in percentage
- **Pt(fin)**: Points assigned to a choice for the economic axis
- **Pt(eco)**: Points assigned to a choice for the ecological axis
- **Pt(soc)**: Points assigned to a choice for the social axis
- **Note(fin)**: Rating for a characteristic in percentage for the economic axis
- **Note(eco)**: Rating for a characteristic in percentage for the ecological axis
- **Note(soc)**: Rating for a characteristic in percentage for the social axis
- **NbCrit**: Number of characteristics that make up a theme

- The rating by characteristic is obtained as follows:
 - In the case of a single choice:
 - The average is calculated based on the selected element by axis:

$$\text{Note(fin)} = \frac{\text{Pt(fin)} \times 100}{\text{Max}(\text{Pt(fin)}, \text{Pt(eco)}, \text{Pt(soc)})}$$

$$\text{Note(eco)} = \frac{\text{Pt(eco)} \times 100}{\text{Max}(\text{Pt(fin)}, \text{Pt(eco)}, \text{Pt(soc)})}$$

$$\text{Note(soc)} = \frac{\text{Pt(soc)} \times 100}{\text{Max}(\text{Pt(fin)}, \text{Pt(eco)}, \text{Pt(soc)})}$$

$$\text{Note} = \frac{(\text{Note(fin)} + \text{Note(eco)} + \text{Note(soc)})}{3}$$

- In the case of multiple choices
 - The average is calculated based on the sum of the selected elements by axis:

$$\text{Note(fin)} = \frac{\sum(\text{Pt(fin)}) \times 100}{\sum(\text{Max}(\text{Pt(fin)}, \text{Pt(eco)}, \text{Pt(soc)}))}$$

$$\text{Note(eco)} = \frac{\sum(\text{Pt(eco)}) \times 100}{\sum(\text{Max}(\text{Pt(fin)}, \text{Pt(eco)}, \text{Pt(soc)}))}$$

$$\text{Note(soc)} = \frac{\sum(\text{Pt(soc)}) \times 100}{\sum(\text{Max}(\text{Pt(fin)}, \text{Pt(eco)}, \text{Pt(soc)}))}$$

$$\text{Note} = \frac{(\text{Note(fin)} + \text{Note(eco)} + \text{Note(soc)})}{3}$$

- The rating by theme is obtained as follows:
 - Average by theme based on the number of characteristics:

$$\text{NoteTheme(fin)} = \frac{\sum(\text{Note(fin)})}{\text{NbCrit}}$$

$$\text{NoteTheme(eco)} = \frac{\sum(\text{Note(eco)})}{\text{NbCrit}}$$

$$\text{NoteTheme(soc)} = \frac{\sum(\text{Note(soc)})}{\text{NbCrit}}$$

4.3. Impact on the Results Obtained

The calculation method used highlights the trend of the proposed monetary system based on the axes (economic, ecological, social).

Since the number of single-choice questions is greater than the number of multiple-choice questions, this results in minimal differences in the overall scores; discrimination is achieved across the three axes. Therefore, it is not the overall score that is discriminative for evaluating the projects, but rather the comparison of the scores by theme across the three axes when comparing scores axis by axis. This comparison will truly highlight the uniqueness of the projects in relation to one another.

5. Comparative Analysis

Here we present a comparative analysis of the complementary currency for the common good with the free currency Ţ1 (June). This type of analysis can be conducted with any monetary system recorded in the comparator, whether it is at the project stage, in implementation, or in operation. For clarity, we preferred to make limited comparisons, restricted to two or three monetary systems at a time.

5.1. The Complementary Currency for the Common Good

(<http://lhed.fr>)

Date of creation : 2000-01-01

Author(s) : Philippe DERUDDER

Organization: L'homme en devenir

Circulating Amount : Ongoing project (as of 2024-01-01)

Objective: To create a complementary currency free of debt that empowers the financing of collective interest activities.

Detailed Description of the complementary currency for common good:

The goal is to harmonize individual and collective interests, shifting from a monetary system driven by debt and profit to one focused on planetary sustainability. Currently, money is created for profitable activities, while collective needs depend on taxation and debt. The proposed system empowers the Common Good economy, prioritizing societal benefits like health, education, and ecological transition. It operates alongside the market system, funded by a debt-free, citizen-controlled currency created for eco-social projects. Deliberative assemblies would validate and direct funding towards responsible, sustainable consumption, ensuring dignified sufficiency for all while respecting the planet's limits.

5.2. The Free Currency Ţ1 (June)

<https://monnaie-libre.fr/>

Date of creation :

Author(s) : Stéphane Laborde (TRM) et la communauté (Duniter)

Another Monetary Creation:

The free currency enables a more just and sustainable economic model, which needs to be conceived and implemented.

The free currency does not favor anyone, neither geographically nor from one generation to another: each person creates their relative equal share of currency every day. June is an ongoing experiment, accessible to everyone, with no other condition than to choose it and to be certified by five members already belonging to the community.

5.3. Systematic Inventory of Selected Elements

Before entering into detailed analysis, there is detailed description of the projects in appendix I and II. This summarizes, grouped by themes and characteristics, the elements that describe the analyzed currency systems : M3 - complementary currency for the common good, M7 - the free currency Ţ1 (June).

5.4. Thematic Characteristics

The analysis of thematic characteristics aims to highlight the particularities and specificities of the analyzed monetary systems. The distribution of scores by theme provides us with more information about the structural differences and internal workings of each project. Here, we aim to conduct a horizontal reading of the following table.

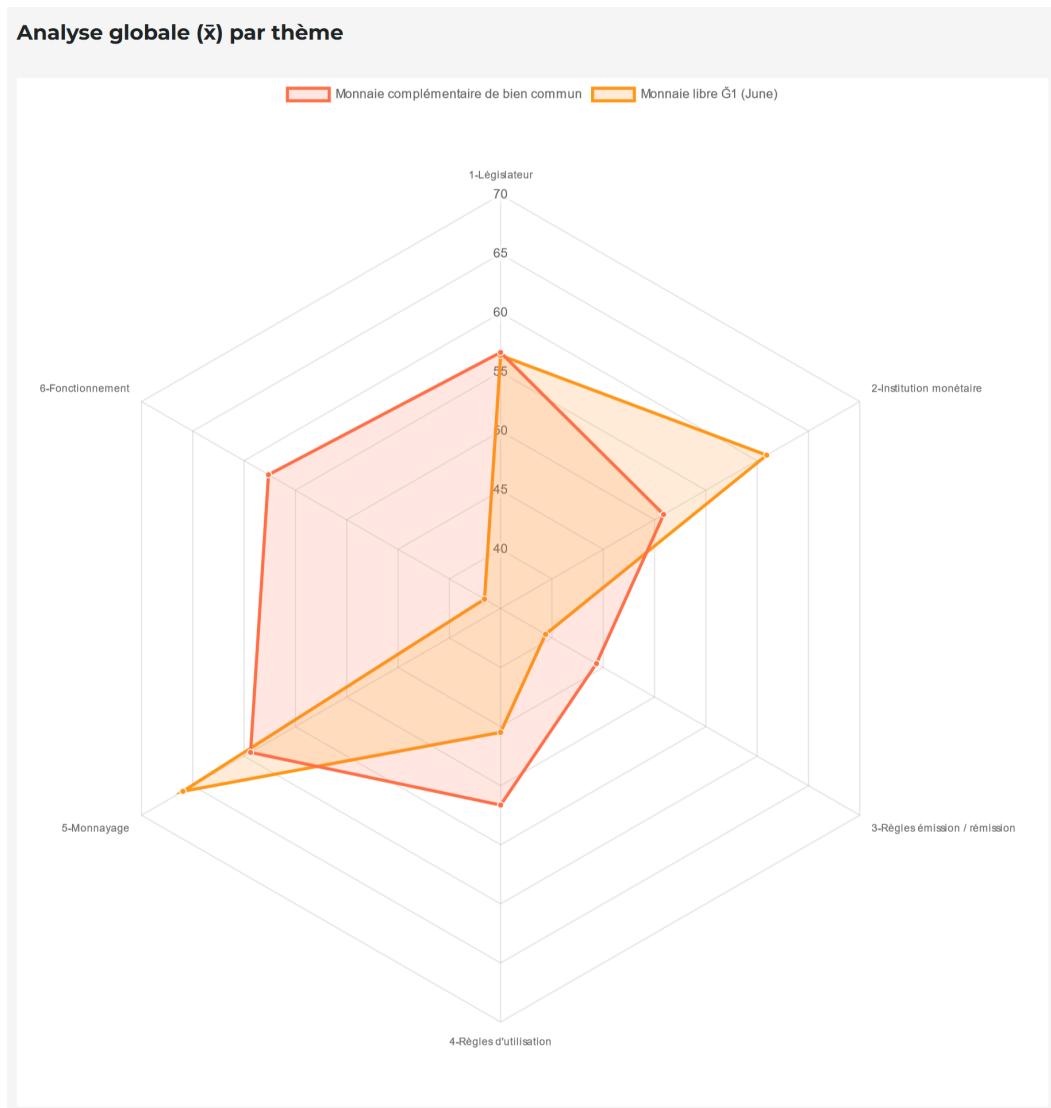
Tableau 1

| Thèmes | Monnaie complémentaire de bien commun | | | | Monnaie libre G1 (June) | | | |
|--|---------------------------------------|---------|---------|---------|-------------------------|---------|---------|---------|
| | | | | | | | | |
| 0 - Généralités | 74.72 % | 87.22 % | 78.89 % | 80.28 % | 81.67 % | 62.92 % | 73.33 % | 72.64 % |
| 1 - Législateur | 41.42 % | 65.09 % | 63.48 % | 56.66 % | 39.31 % | 61.07 % | 68.84 % | 56.41 % |
| 2 - Institution monétaire | 34.24 % | 63.57 % | 54.86 % | 50.89 % | 17.61 % | 74.86 % | 90.32 % | 60.93 % |
| 3 - Règles émission / rémission | 34.73 % | 50.68 % | 47.62 % | 44.34 % | 32.01 % | 37.35 % | 48.79 % | 39.38 % |
| 4 - Règles d'utilisation | 41.02 % | 39.39 % | 74.49 % | 51.64 % | 62.23 % | 26.52 % | 47.73 % | 45.49 % |
| 5 - Monnayage | 68.82 % | 40.67 % | 68.62 % | 59.37 % | 46.38 % | 75.33 % | 76.18 % | 65.96 % |
| 6 - Fonctionnement | 46.37 % | 63.69 % | 62.81 % | 57.62 % | 39.91 % | 25.03 % | 44.77 % | 36.57 % |
| 7 - Conséquences attendues / observées | 53.33 % | 41.67 % | 66.67 % | 53.89 % | 52.38 % | 27.78 % | 91.67 % | 57.28 % |
| Thèmes de 1 à 6 | 44.43 % | 53.85 % | 61.98 % | 53.42 % | 39.57 % | 50.02 % | 62.77 % | 50.79 % |

It can be observed that there can be more than a 10% difference between certain cells on the same theme across the two projects. This gap highlights the differences in the design of the two studied monetary systems. For example, in theme 2—monetary institution—on the social axis, there is a gap of 54.86% for the complementary currency of the common good compared to 90.32% for the June currency. This 36-point difference can be explained by examining the detailed information of each monetary system. In this case, the June currency presents trust arguments related to the technology used and its private nature, whereas the complementary currency of the common good falls under a public and citizen institution. This information is accessible for each monetary system in the textual description or in the detailed comparison.

We will not delve into the numerical analysis theme by theme, as the following graphs visually highlight the differences of each project. The detailed analysis tables, included in the appendix II, allow for a theme-by-theme and characteristic-by-characteristic comparison of the two currencies (M3 and M7). The numerical data reveal the differences between the projects.

The overall analysis (\bar{x}) by theme allows us to highlight the themes that differentiate the compared monetary systems and those on which they do not differ. Thus, the G1 (June) is characterized by its predominance in monetary institution themes, thanks to the trust attributes mentioned earlier, and its electronic currency offering high protection against counterfeiting. The complementary currency of the common good stands out in its themes of issuance/remittance rules, usage rules, and functioning, particularly by being issued in exchange for the relevance of projects and activities regarding the common good.



5.5. Monetary Systems Orientation

Table 2

Par projet monétaire

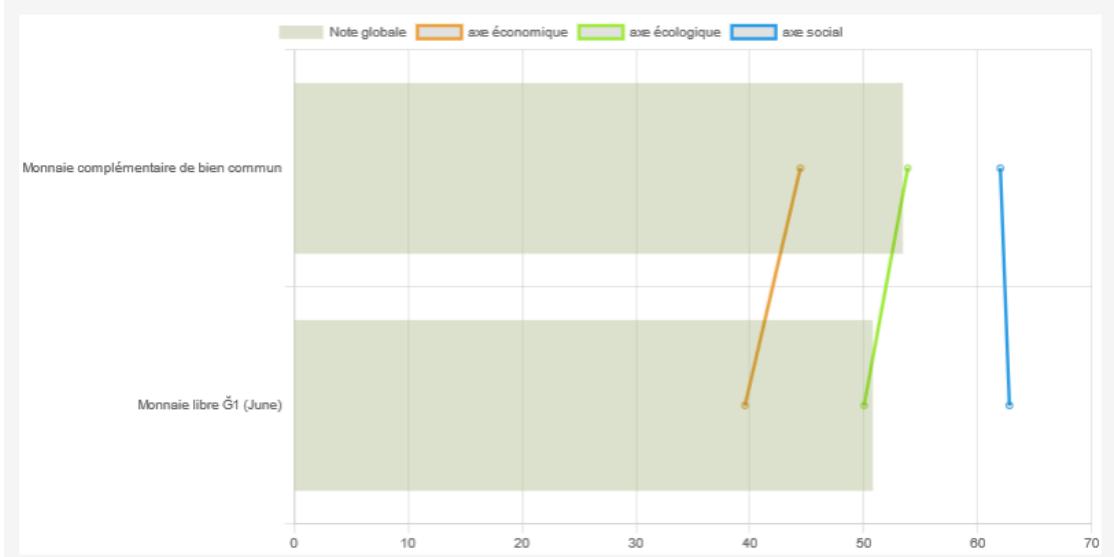
| Projet(s) monétaire(s) | | | | \bar{x} |
|---------------------------------------|---------|---------|-------|-----------|
| Monnaie complémentaire de bien commun | 44.43 % | 53.85 % | 61.98 | 53.42 % |
| Monnaie libre Ţ1 (June) | 39.57 % | 50.02 % | 62.77 | 50.79 % |

The general orientation of the monetary systems is determined from a vertical reading of Table 1, with totals presented in Table 2.

In terms of general orientation, overarching objectives, and values defended, the complementary currency for the common good is primarily oriented towards addressing social issues (61.98%), followed by environmental issues (53.85%), and finally economic issues (44.43%). Its main priorities are ecological preservation and ecosystem restoration. This same trend is found in the June currency but with a more pronounced orientation towards the social axis (62.77%) and social equity, supported by an original monetary issuance method called "universal dividend (DU)," followed by the ecological (50.02%) and economic (39.57%) axes.

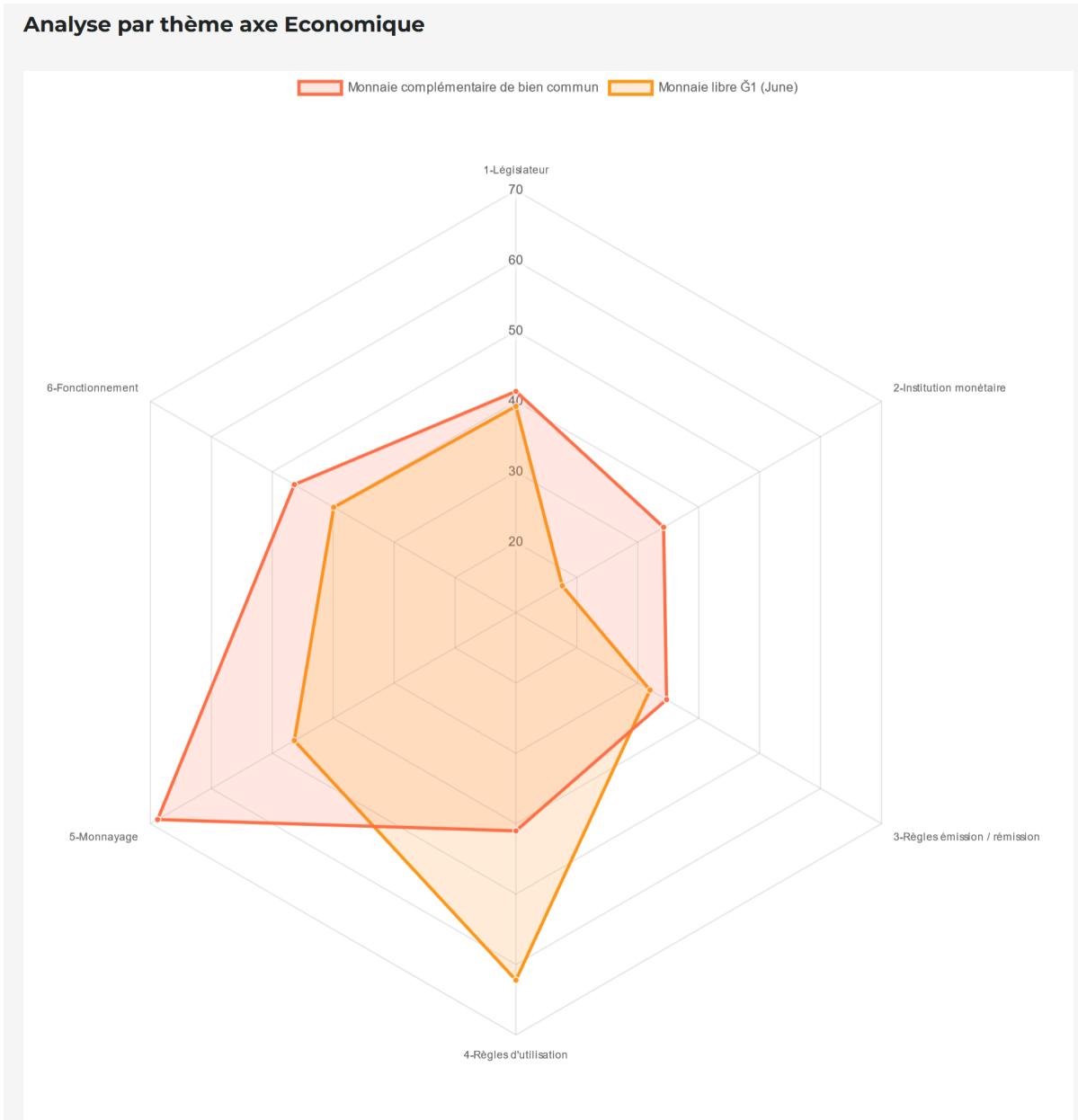
For the overall analysis by axis, presented in the following graph that is read horizontally (with percentages on the x-axis), the overall score of each system is symbolized by a horizontal gray rectangle (see Table 1). Differences by axis are represented by colored lines. The vertical blue line indicates that both systems have nearly the same score of approximately 61% on the social axis for the complementary currency for the common good (M3) and 62% for the Ţ1-June (M7). It is also noted that the Ţ1-June (M7) receives a lower evaluation on the economic (orange) and ecological (green) axes compared to the complementary currency for the common good (M3).

Analyse globale par axe



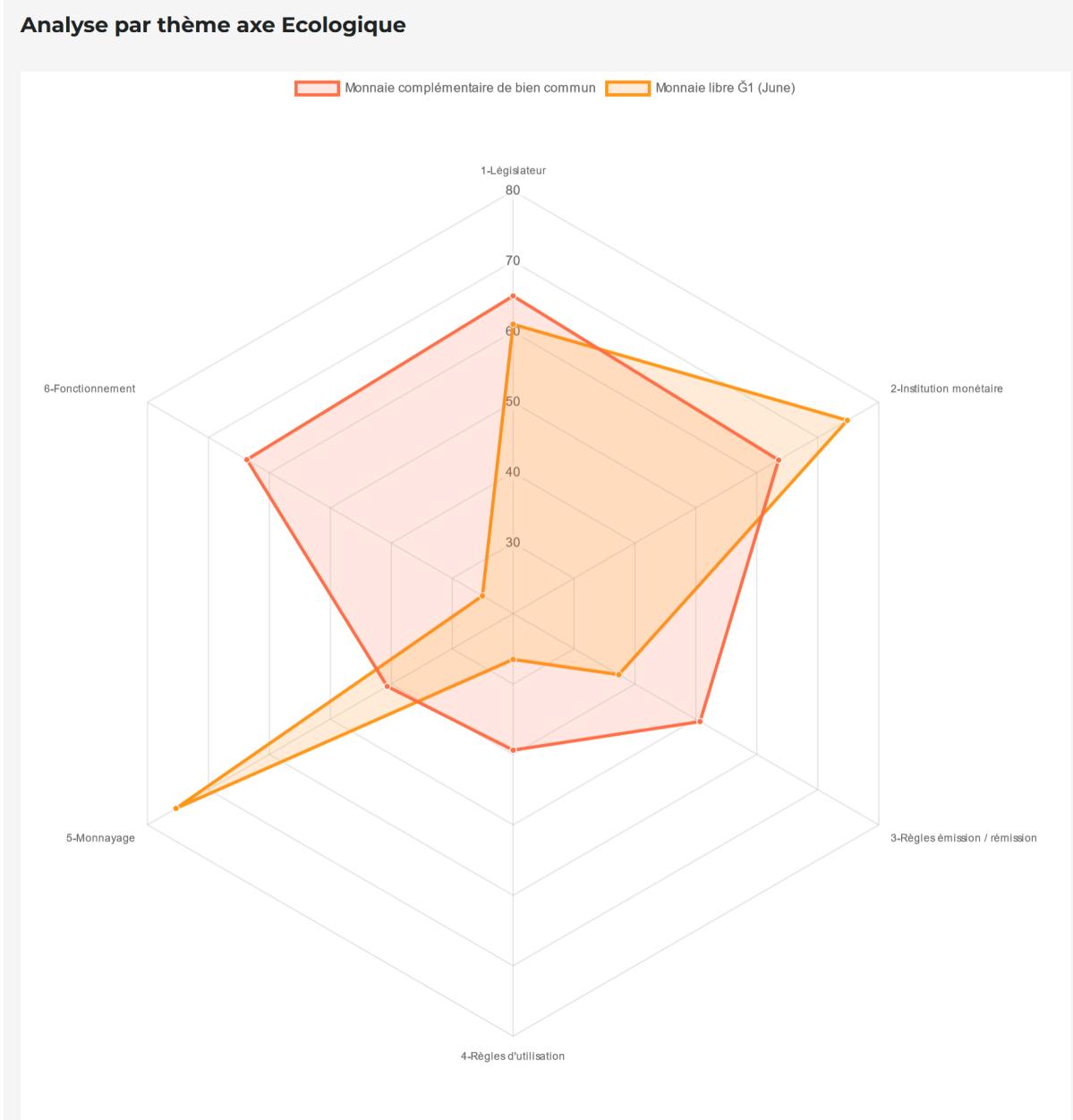
Economic axis

The thematic analysis of the economic axis reveals more subtle differences between the compared systems regarding the themes of currency issuance ($M3 = 68.82\%$) and usage rules ($M7 = 65.64\%$), with usage rules being dominant. The complementary currency ($M3$) stands out due to its material supports and the fact that it is issued by a public body, which fosters trust through guarantees from the issuing authorities. In contrast, the $\text{G}1$ -June ($M7$) is a universally usable currency, which enhances its economic role. Furthermore, while it is non-convertible, its valuation is determined by the supply and demand for products and services denominated in $\text{G}1$.



Ecological Axis

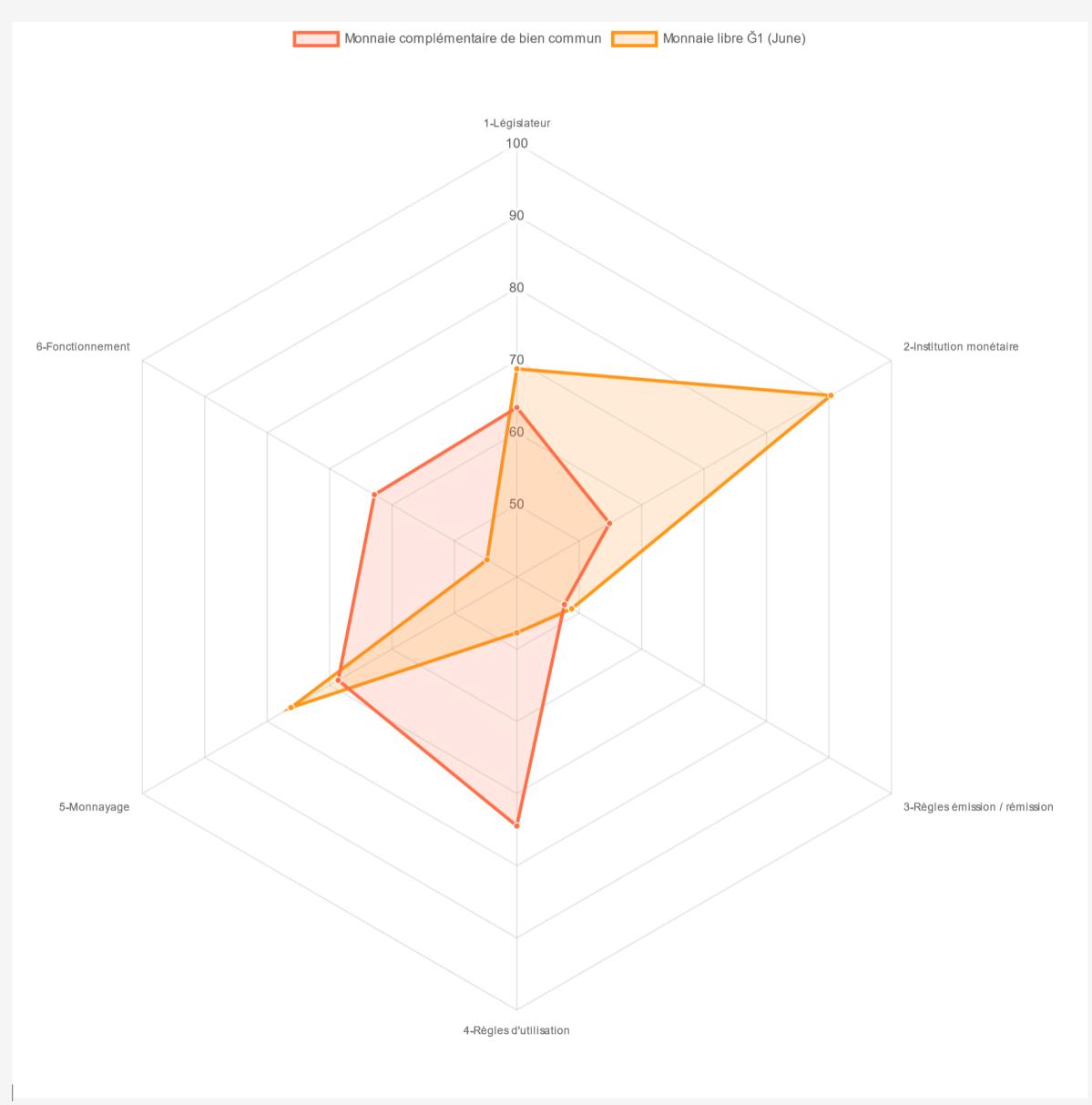
In the analysis of the ecological axis, more pronounced differences emerge. The Ĝ1 (June), being a cryptocurrency, stands out in the themes of monetary institution (74.86%) and currency issuance (75.33%), whereas the complementary currency highlights the legislator (65.09%), the rules of issuance/remittance (50.68%), and monetary functioning (63.69%). In terms of functioning, the complementary currency is distinguished by its plurality of monetary supports (fiduciary, scriptural, electronic). On the other hand, the Ĝ1 (June) is noted for its open algorithm, the trust associated with its storage method, the decentralization of ownership, and its technical foundation.



Social Axis

Regarding the social axis, the orientation of the two systems is very different. The G1 (June) is characterized by a high score for the monetary institution (90.32%), while the complementary currency of the common good stands out in the theme of rules of use (74.49%). The complementary currency of the common good is a currency with national aspirations for specific social and ecological uses, whereas the G1 (June) is a regional currency for universal use. In terms of anonymity, the complementary currency is characterized by guaranteed anonymity that can only be lifted by account holders, while the G1 (June) does not guarantee anonymity.

Analyse par thème axe Social



6. General Conclusion

The literature on monetary systems, along with various typological proposals, has informed our reflection, leading to the definition of an analytical framework that allows us to create our model for comparing monetary systems based on a hierarchical structure of themes, characteristics, and elements evaluated across three axes: the economic axis, the ecological axis, and the social axis. An inventory of these themes, characteristics, and elements is included in the annex with the selected values for the monetary systems compared in this document.

We have developed a software application that enables the recording of all themes, characteristics, and elements by axis for each monetary system. We have named it "the monetary comparator."⁸ The application allows for the calculation of averages by theme based on the evaluations mentioned above. These averages can then be compared using radar charts to highlight the differences between monetary systems. Therefore, we prefer to refer to it as monetary topology a posteriori rather than monetary typology a priori.

In the comparative analysis we have presented, we found that the complementary currency of the common good is defined as a national currency for specific social and ecological uses, with the anonymity of use being lifted only by account holders. It stands out for its plurality of monetary supports (fiduciary, scriptural, electronic) and for being issued by a public body, which should foster trust due to the guarantee from the issuing authorities.

The Ţ1 (June) is defined as a universal currency for general economic use. While it is non-convertible, its valuation is solely based on the supply and demand of products and services denominated in Ţ1. It is a cryptocurrency whose technical configuration—open algorithm, storage means, decentralization of holding (wallet), and technical foundation—establishes the trust of its users. The Ţ1 (June) does not guarantee anonymity.

We are open to enhancing our model by adding characteristics or elements that would enrich the approach. We invite designers and analysts of monetary systems to contribute their models to the monetary comparator. One of the changes that we want to apply on the model is to create two distinct characteristics on theme 3 (issuance/redemption rules):

1. The counterpart of monetary issuance:

- Money created from a loan: debt money
- Money created from a service rendered (cryptos and LETS)
- Money that can be bought and exchanged (local currencies)
- Money without any counterpart (June, Being Human, Idena, Circle, etc.)

2. The degree of centralization of issuance:

- Money created by a central unit and given (central bank money)

⁸ https://economistes.org/money_comparator/

- Money created by a single institution composed of distinct entities (private bank money)
- Distributed money created by community members (some cryptocurrencies)

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Appendix I : Comparison of selected elements

| Themes and characteristics | Elements | Elements |
|--|---|---|
|  0 - Généralités | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ţ1 (June) |
| 0.1 - Avancement | <ul style="list-style-type: none"> • Théorie • Théorie revue par des pairs • En cours de développement | <ul style="list-style-type: none"> • Théorie • Théorie revue par des pairs • POC : Proof of Concept • En cours de développement • Déploiement Alpha sur un groupe d'utilisateurs choisis • Déploiement pour le public |
| 0.2 - Nombre d'usagers | <ul style="list-style-type: none"> • Non déployé : aucun usagers | <ul style="list-style-type: none"> • Restreint : plusieurs milliers d'usagers |
| 0.3 - Mise en oeuvre | <ul style="list-style-type: none"> • Demande une transformation du système et des personnes en profondeur | <ul style="list-style-type: none"> • Existe déjà et déjà en place |
| 0.4 - Acceptabilité | <ul style="list-style-type: none"> • Nécessaire mais pas forcément désiré par l'ensemble de la population (question de survie ou de préservation de population humaine ou non humaine en danger) | <ul style="list-style-type: none"> • Acceptable (Avec des améliorations sans grande perturbation du système économique actuel) |

|  1 - Législateur | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ģ1 (June) |
|---|--|---|
| 1.1 - Le législateur | <ul style="list-style-type: none"> • Autorité publique d'un pays | <ul style="list-style-type: none"> • Groupement d'être humains hyperlocal : association de fait |
| 1.2 - Gouvernance | <ul style="list-style-type: none"> • Démocratie directe ou participative | <ul style="list-style-type: none"> • Organique (DAO) |
| 1.3 - Objectif généraux | <ul style="list-style-type: none"> • Financement de projets particuliers de nature sociale / environnementale / sanitaire / culturelle / ... • Développement d'une complémentarité au système bancaire et au système de paiement | <ul style="list-style-type: none"> • Financement de l'économie en général • Développement d'une complémentarité au système bancaire et au système de paiement |
| 1.4 - Objectif de Création monétaire | <ul style="list-style-type: none"> • Objectifs de service public : enseignement, santé, justice,... • Objectifs de bien commun : écologie, biodiversité, eau, ... | <ul style="list-style-type: none"> • Objectifs de bien-être personnel : savoir, connaissance, santé, culture, entraide (immatériel) • Objectifs économiques : investissements des entreprises, développement économique |
| 1.5 - Légitimité | <ul style="list-style-type: none"> • Légitimité institutionnelle validée par un processus juridique national | <ul style="list-style-type: none"> • Légitimité purement sociale et citoyenne, légitimité de fait |
| 1.6 - Attributs de confiance | <ul style="list-style-type: none"> • Confiance éthique : confiance dans l'éthique présumée du législateur fonde la confiance dans le système monétaire | <ul style="list-style-type: none"> • Confiance technico-humaine : confiance dans la complémentarité de l'homme aidé par la machine |

|  2 - Institution monétaire | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ģ1 (June) |
|---|---|---|
| 2.1 - Forme juridique | <ul style="list-style-type: none"> Autorité publique centrale : Banque centrale ou Institut monétaire relevant de l'Etat | <ul style="list-style-type: none"> Membre quelconque du système monétaire : membre de l'Association de crédit mutuel, bénéficiaire d'une prestation dans un système banque du temps (SEL, Accorderies, Time Banking) |
| 2.2 - Centralisation | <ul style="list-style-type: none"> Centralisé : Emission par une entité unique sur un territoire donné | <ul style="list-style-type: none"> Décentralisé : Emission par plusieurs entités sur le territoire |
| 2.3 - Intérêt financier | <ul style="list-style-type: none"> à But non lucratif et d'intérêt général | <ul style="list-style-type: none"> à But non lucratif mais d'intérêt pour les membres uniquement |
| 2.4 - Gouvernance | <ul style="list-style-type: none"> Démocratique : participation, représentation des utilisateurs, représentation des corps sociaux, interactions avec l'autorité mandatée en amont de l'institution monétaire | <ul style="list-style-type: none"> Coopératif et systémique : par amélioration systématique des règles contractuelles définies par processus collaboratif (sociocratie, holacratie,...) |
| 2.5 - Arguments de confiance | <ul style="list-style-type: none"> Légaux et institutionnels (organisme public) | <ul style="list-style-type: none"> Démocratiques Sociaux : l'intégration et la stabilité sociale. Bien être et progression individuelle Techniques liés aux supports et aux systèmes de paiement (anti-fraude, protocoles, algorithmes, etc.) Systémique : relatif à un système reconnu pertinent dans son ensemble |

|  3 - Règles émission / rémission | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ģ1 (June) |
|---|---|--|
| 3.1 - Modalité d'émission | <ul style="list-style-type: none"> • Don monétaire / création sui generis | <ul style="list-style-type: none"> • Don monétaire / création sui generis |
| 3.2 - Condition d'émission | <ul style="list-style-type: none"> • Conditions d'usage / d'affectation • Conditions liées à la contrepartie : solvabilité, majorité • Critères de localisation : monnaie locale ou territoriale • Systématique : lié au système que l'on utilise | <ul style="list-style-type: none"> • Systématique : lié au système que l'on utilise |
| 3.3 - Outil de fléchage | <ul style="list-style-type: none"> • actions sur la masse monétaire - financement direct de projets • création de substituts monétaires (monnaie complémentaire , monnaies fléchées, etc..) | <ul style="list-style-type: none"> • actions sur la masse monétaire - Don aux particuliers (hélicoptère monétaire) |
| 3.4 - Bénéficiaire initial | <ul style="list-style-type: none"> • Autorité publique régionale ou locale | <ul style="list-style-type: none"> • Personne physique quelconque du système monétaire |
| 3.5 - Modalité de l'émission initiale | <ul style="list-style-type: none"> • Émission ponctuelle suite à une décision démocratique du régulateur | <ul style="list-style-type: none"> • Emission à flux déterminé (conditions prévue par le législateur) et vérifiées par un algorithme (exemple : smartcontracts) |
| 3.6 - Souveraineté / dépendance monétaire | <ul style="list-style-type: none"> • monnaie complémentaire avec cours légal & taux de change fixe | <ul style="list-style-type: none"> • monnaie alternative : non reliée à la monnaie souveraine (taux de couverture faible voire nulle, crédit mutuel ou un critère non monétaire : temps) |

| | | |
|--|---|--|
| 3.7 - Type de couverture | <ul style="list-style-type: none"> Contrepartie immatérielle : travail, prestation, socialement ou écologiquement bénéfique... | <ul style="list-style-type: none"> monnaie sans contrepartie |
| 3.8 - Fonction monétaire | <ul style="list-style-type: none"> Moyen de paiement uniquement (MP) Moyen de gouvernance sociétale (monnaie fléchée) | <ul style="list-style-type: none"> Réserve de valeur avec intérêt (RVi) Réserve de valeur sans intérêt (RV) Unité de compte (UC) Moyen de paiement uniquement (MP) |
| 3.9 - Fonction de financement principal | <ul style="list-style-type: none"> Fonction de paiement | <ul style="list-style-type: none"> Fonction de paiement |
| 3.10 - Destruction monétaire | <ul style="list-style-type: none"> Décision politique : Retrait de la monnaie par l'autorité publique via la fiscalité | <ul style="list-style-type: none"> Pas de destruction monétaire volontaire |
| 3.11 - Confiance | <ul style="list-style-type: none"> Règles changeantes connues de tous | <ul style="list-style-type: none"> Règles permanentes connues de tous |
| 3.12 - Position dans la hiérarchie monétaire | <ul style="list-style-type: none"> Monnaie non convertible ou convertible partiellement en monnaie souveraine | <ul style="list-style-type: none"> Monnaie non convertible ou convertible partiellement en monnaie souveraine |
| 4 - Règles d'utilisation | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ģ1 (June) |

| | | |
|--|---|--|
| 4.1 - Conditions à l'utilisation | <ul style="list-style-type: none"> Monnaie à usage spécifique : aide sociale, utilisable dans certains magasins, réservées à certains produits (écochèques), certains services (titres-services, miles d'avions, tickets restaurant) ou monnaie fléchée | <ul style="list-style-type: none"> Monnaie à usage universel complet : permet d'acheter tous types de biens et services monnaie souveraine (y compris JEU : Jardin d'Echange Universel, ...) |
| 4.2 - Convertibilité | <ul style="list-style-type: none"> Inconvertibilité avec une monnaie souveraine | <ul style="list-style-type: none"> Inconvertibilité avec une monnaie souveraine |
| 4.3 - Valorisation extrinsèque | <ul style="list-style-type: none"> Aucune valorisation extrinsèque | <ul style="list-style-type: none"> Valeur de marché (offre / demande) : taux de change variable |
| 4.4 - Restriction spatiale | <ul style="list-style-type: none"> National : monnaie nationale (Franc, Dollar) | <ul style="list-style-type: none"> Régional : monnaie régionale |
| 4.5 - Restriction temporelle | <ul style="list-style-type: none"> Monnaie permanente dont la durée est théoriquement illimitée : Bitcoin, Monnaie créée par le don ou l'échange de devises (monnaies qui ne possèdent pas un mécanisme de destruction endogène) | <ul style="list-style-type: none"> Monnaie permanente dont la durée est physiquement illimitée |
| 4.6 - Restriction sociale | <ul style="list-style-type: none"> monnaie utilisée par tous les groupes sociaux | <ul style="list-style-type: none"> monnaie interne à un groupe social ou une communauté |
| 4.7 - Anonymat à la détention (hors détenteur du compte) | <ul style="list-style-type: none"> Anonyme vis-à-vis de tous tiers, sauf les teneurs de compte (banque) | <ul style="list-style-type: none"> Pas d'anonymat |

| | | |
|--|---|--|
| 4.8 - Anonymat de la transaction | <ul style="list-style-type: none"> Transaction traçable mais anonyme à l'égard de tous tiers | <ul style="list-style-type: none"> Transaction traçable mais anonyme à l'égard de tous tiers |
| 4.9 - Intérêts créditeurs | <ul style="list-style-type: none"> la monnaie ne porte pas intérêt : strict instrument de paiement | <ul style="list-style-type: none"> la monnaie ne porte pas intérêt : strict instrument de paiement |
| 4.10 - Condition sur la transaction | <ul style="list-style-type: none"> aucune contrainte particulière | <ul style="list-style-type: none"> aucune contrainte particulière |
| 5 - Monnayage | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ţ1 (June) |
| 5.1 - Support matériel | <ul style="list-style-type: none"> monnaie fiduciaire (billets) monnaie scripturale (écriture dans un livre de compte numérique ou réel : papier) monnaie électronique (écriture dans un livre de compte numérique) | <ul style="list-style-type: none"> monnaie électronique (écriture dans un livre de compte numérique) |
| 5.2 - Type de certification | <ul style="list-style-type: none"> Certifié par l'émetteur - processus interne | <ul style="list-style-type: none"> Certifié par un algorithme certificateur : le système |
| 5.3 - Forme juridique du certificateur | <ul style="list-style-type: none"> Organe public : banque centrale, Etat, monnaie royale, autorité locale | <ul style="list-style-type: none"> Algorithme ouvert (open source / non propriétaire) |

| | | |
|---|---|--|
| 5.4 - Attribut de la confiance méthodique | <ul style="list-style-type: none"> • Caractéristiques du support monétaire | <ul style="list-style-type: none"> • Caractéristiques du moyen de stockage |
| 5.5 - Valorisation Intrinsèque | <ul style="list-style-type: none"> • Valorisation symbolique : monnaie fiat | <ul style="list-style-type: none"> • Valorisation symbolique : monnaie fiat |
| 5.6 - Stockage et détention | <ul style="list-style-type: none"> • Mixte | <ul style="list-style-type: none"> • Décentralisé |
| 5.7 - Supports technologiques des transactions | <ul style="list-style-type: none"> • Technologique | <ul style="list-style-type: none"> • Technologique |
| 5.8 - Garantie d'anonymat de la transaction | <ul style="list-style-type: none"> • Garanti par le support monétaire anonyme (billets et pièces) | <ul style="list-style-type: none"> • Garanti par l'anonymisation technique des données (totale ou partielle) |
| 5.9 - Garantie de fin de transaction | <ul style="list-style-type: none"> • Garantie par les autorités détentrices des 2 parties | <ul style="list-style-type: none"> • Garantie par le système de transaction ou le socle technique |
| 5.10 - Inflation / déflation | <ul style="list-style-type: none"> • Neutre (ou ajustable dynamiquement) | <ul style="list-style-type: none"> • monnaie à caractère relatif |

| | | |
|---|---|--|
|  Fonctionnement 6 | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ă1 (June) |
| 6.1 - Coût du système de paiement | <ul style="list-style-type: none"> • Infrastructure réseau • Impression de documents • Employés • Terminal, téléphone, tablette, PC | <ul style="list-style-type: none"> • Infrastructure réseau • Terminal, téléphone, tablette, PC |
| 6.2 - Impact énergétique direct | <ul style="list-style-type: none"> • Impression de documents • Employés | <ul style="list-style-type: none"> • Infrastructure réseau • Terminal, téléphone, tablette, PC |
| 6.3 - Vitesse de circulation | <ul style="list-style-type: none"> • V = à 1 : Monnaie disponible en adéquation au besoin sur une période donnée | |
| 6.4 - Nature du volume | <ul style="list-style-type: none"> • Volume variable en fonction de règles internes | <ul style="list-style-type: none"> • Volume à croissance constante |
| 6.5 - Méthode d'évaluation du volume | <ul style="list-style-type: none"> • Banque centrale / solde : système bancaire | <ul style="list-style-type: none"> • Solde du ledger (solde du livre de compte global) |
| 6.6 - Evaluation du volume | <ul style="list-style-type: none"> • Volume / PIB • Volume / habitant (contributeur) • Autre | <ul style="list-style-type: none"> • Volume / habitant (contributeur) |

| | | |
|--|--|---|
| 6.7 - Confiance | <ul style="list-style-type: none"> confiance d'usage (utilisation répandue) | <ul style="list-style-type: none"> confiance d'usage (utilisation répandue) |
| 6.8 - Valorisation | <ul style="list-style-type: none"> valeur fixée (décisions politique, limitation sur les ressources disponibles) | <ul style="list-style-type: none"> Offre / demande (créé par le marché) |
| 7 - Conséquences attendues / observées | M3 - The Complementary Currency for the Common Good | M7 - The Free Currency Ģ1 (June) |
| 7.1 - Conséquences sociales | <ul style="list-style-type: none"> Incidence positive | <ul style="list-style-type: none"> Incidence positive |
| 7.2 - Conséquences écologiques | <ul style="list-style-type: none"> Incidence positive | <ul style="list-style-type: none"> Incidence négative mineure |
| 7.3 - Conséquences économiques | <ul style="list-style-type: none"> Incidence positive (croissance) | <ul style="list-style-type: none"> Incidence positive mineure |

Appendix II : Detailed Comparison

- M3 - Complementary Currency for the Common Good
- M7 - Free Currency G1 (June)

| Thème | Caractéristique | Elément | | | | M3 | M7 |
|-------|----------------------|---|---|---|---|----|----|
| | 0 - Généralités | | | | | | |
| | 1 - Avancement | 1 - Théorie | 1 | 1 | 1 | | |
| - 0 | | 2 - Théorie revue par des pairs | 1 | 1 | 1 | | |
| | | 3 - POC : Proof of Concept | 1 | 1 | 1 | | |
| | | 4 - Levée de fonds | 1 | 1 | 1 | | |
| | | 5 - En cours de développement | 1 | 1 | 1 | | |
| | | 6 - En cours d'agrégation ou agrément officiel déjà délivré | 1 | 1 | 1 | | |
| | | 7 - Déploiement Alpha sur un groupe d'utilisateurs choisis | 1 | 1 | 1 | | |
| | | 8 - Déploiement pour le public | 1 | 1 | 1 | | |
| | | 9 - Déjà déployé massivement, voire complètement | 1 | 1 | 1 | | |
| | 2 - Nombre d'usagers | 1 - Monopole : plusieurs milliards d'usagers | 5 | 5 | 5 | | |
| - 0 | | 2 - Commun : plusieurs millions d'usagers | 4 | 4 | 4 | | |
| | | 3 - Restreint : plusieurs milliers d'usagers | 3 | 3 | 3 | | |
| | | 4 - Limité : jusqu'à mille usagers | 2 | 2 | 2 | | |
| | | 5 - Testeurs : moins de cents usagers | 1 | 1 | 1 | | |

| | | | | | |
|---|--|--|---|---|---|
| | 6 - Non déployé : aucun usagers | 0 | 0 | 0 | |
|  | 3 - Mise en oeuvre | 1 - Existe déjà et déjà en place | 1 | 1 | 1 |
| - 0 | | 2 - Demande des améliorations réalistes du système existant | 1 | 1 | 1 |
| | | 3 - Demande des adaptations importantes du système existant | 1 | 1 | 1 |
| | | 4 - Existe déjà mais demande un déploiement d'échelle | 1 | 1 | 1 |
| | | 5 - N'existe pas encore et demande un déploiement d'échelle | 1 | 1 | 1 |
| | | 6 - Demande une transformation du système et des personnes en profondeur | 1 | 1 | 1 |
| | | 7 - Utopique ou mise en place très lourde | 1 | 1 | 1 |
|  | 4 - Acceptabilité | 1 - Inacceptable par la société civile | 1 | 1 | 0 |
| - 0 | | 2 - Déjà accepté par la majorité de la population (sans être forcément désiré) | 1 | 1 | 0 |
| | | 3 - Envisageable (Avec des améliorations mineures du système économique actuel) | 2 | 2 | 2 |
| | | 4 - Acceptable (Avec des améliorations sans grande perturbation du système économique actuel) | 2 | 1 | 2 |
| | | 5 - Souhaitable, désirable (Avec des améliorations conséquente qui engendre le profondes modifications du système économique actuel) avec perturbation du système actuel) | 1 | 3 | 3 |
| | | 6 - Nécessaire mais pas forcément désiré par l'ensemble de la population (question de survie ou de préservation de population humaine ou non humaine en danger) | 1 | 4 | 2 |

| | | | |
|---|---|---|---|
| 7 - Nécessaire et désiré par l'ensemble de la population (question de survie ou de préservation de population humaine ou non humaine en danger) | 2 | 4 | 3 |
|---|---|---|---|

| Thème | Caractéristique | Elément |  |  |  | M3 | M7 |
|---|---|---|---|---|---|---|----|
|  | <h2>1 - Législateur</h2> | | | | | | |
| - 1 |  | 1 - Le législateur | 1 - Groupement d'entreprises à but lucratif | 8 | 0 | 1 | |
| | | 2 - Entreprise individuelle à but lucratif | 7 | 0 | 2 | | |
| | | 3 - Autorité publiques d'une association de Pays / Organisation supranationale | 5 | 1 | 3 | | |
| | | 4 - Autorité publique d'un pays | 4 | 2 | 3 |  | |
| | | 5 - Autorité publique locale ou régionale | 3 | 3 | 3 | | |
| | | 6 - Association citoyenne local : association formelle | 1 | 4 | 4 | | |
| | | 7 - Groupement d'être humains hyperlocal : association de fait, Université... | 1 | 4 | 4 |  | |
|  | <h2>2 - Gouvernance</h2> | | | | | | |
| - 1 | | 1 - Autocratique | 1 | 1 | 1 | | |
| | | 2 - Technocratique | 2 | 2 | 2 | | |
| | | 3 - Démocratie représentative | 3 | 3 | 3 | | |
| | | 4 - Démocratie directe ou participative | 3 | 3 | 3 |  | |
| | | 5 - Organique (DAO) | 3 | 3 | 3 |  | |
| | | 6 - Anarchique | 1 | 1 | 1 | | |

| | | | | | | |
|-----|---|--|---|---|---|---|
| | | 7 - Autre | 2 | 2 | 2 | |
| |  3 - Objectif généraux | 1 - Maintenir l'inflation à un niveau prédéfini | 8 | 0 | 1 | |
| - 1 | | 2 - Financement de l'économie en général | 7 | 0 | 2 |  |
| | | 3 - Financement de projets économiques particuliers ou de certains secteurs d'activités particuliers | 6 | 1 | 2 | |
| | | 4 - Financement de projets particuliers de nature sociale / environnementale / sanitaire / culturelle / ... | 1 | 4 | 4 |  |
| | | 5 - Développement d'une complémentarité au système bancaire et au système de paiement | 3 | 3 | 3 |   |
| | | 6 - Développement d'une alternative au système bancaire et au système de paiement | 0 | 5 | 4 | |
| |  4 - Objectif de Creation monétaire | 1 - Objectifs personnels : investissements privés (immobilier, véhicules), dépenses personnelles : biens de consommation (matériel) | 7 | 0 | 2 | |
| - 1 | | 2 - Objectifs de bien-être personnel : savoir, connaissance, santé, culture, entraide (immatériel) | 2 | 1 | 6 |  |
| | | 3 - Objectifs économiques : investissements des entreprises, développement économique | 8 | 0 | 1 |  |
| | | 4 - Objectifs publics d'infrastructure : investissements publics (Bâtiments, routes, ponts, etc) | 3 | 3 | 3 | |
| | | 5 - Objectifs de service public : enseignement, santé, justice,... | 0 | 3 | 6 |  |
| | | 6 - Objectifs de bien commun : écologie, biodiversité, eau, ... | 0 | 5 | 4 |  |

| | | | | | | |
|---|-----------------------------------|--|---|---|---|---|
|  - 1 | 5 - Légitimité | 1 - Légitimité contractuelle provenant du statut de l'entreprise ou du groupement d'entreprise | 7 | 1 | 1 | |
| | | 2 - Légitimité institutionnelle validée par un processus juridique international (DTS, Euros) | 6 | 1 | 2 | |
| | | 3 - Légitimité institutionnelle validée par un processus juridique national (Franc) | 5 | 1 | 3 |  |
| | | 4 - Légitimité institutionnelle régionale ou locale | 3 | 3 | 3 | |
| | | 5 - Combinaison de légitimité institutionnelle et sociale | 2 | 2 | 5 | |
| | | 6 - Légitimité purement sociale et citoyenne , légitimité de fait | 0 | 3 | 6 |  |
| | | 7 - Légitimité défense humaine et/ou biodiversité (ONU, GreenPeace,...) | 0 | 5 | 4 | |
| | | 8 - Légitimité liée à l' architecture fiabilisée d'un système (ex : l'homme aidé par la machine) | 3 | 3 | 3 | |
|  - 1 | 6 - Attributs de confiance | 1 - Confiance institutionnelle hiérarchique : confiance dans le législateur provient de la force qu'il utilise pour imposer le système monétaire qu'il souhaite | 9 | 0 | 0 | |
| | | 2 - Confiance contractuelle : confiance dans le législateur provient de la qualité de la charte fondatrice du système monétaire proposé. Le contrat est la base de la confiance | 3 | 3 | 3 | |
| | | 3 - Confiance institutionnelle démocratique : confiance provient de la légitimité démocratique de l'autorité politique qui légifère sur la question monétaire. Elle inspire la confiance par l'expression démocratique de sa souveraineté | 2 | 1 | 6 | |

| | | | | | |
|--|---|---|---|---|---|
| | 4 - Confiance symbolique dans le législateur grâce à des attributs extérieurs (le potentiel des ressources naturelles, la puissance de l'armée, la stabilité politique, économique, sociale, économique ou monétaire, la capacité financière, etc....) | 7 | 1 | 1 | |
| | 5 - Confiance éthique : confiance dans l'éthique présumée du législateur fonde la confiance dans le système monétaire | 1 | 4 | 4 |  |
| | 6 - Confiance technico-humaine : confiance dans la complémentarité de l'homme aidé par la machine | 3 | 3 | 3 |  |

| Thème | Caractéristique | Elément | | M3 | M7 |
|---|----------------------------------|--|---|----|----|
|  | 2 - Institution monétaire | |    | | |
| - 2 | | | | | |
|  | 1 - Forme juridique | 1 - Organisation internationale supranationale : créée par des Etats formant - ou non - une Union monétaire | 3 | 3 | 3 |
| | | | | | |
| | | 2 - Autorité publique centrale : Banque centrale ou Institut monétaire relevant de l'Etat | 3 | 3 | 3 |
| | | |  | | |
| | | 3 - Autorité publique décentralisée : administration relevant d'une Région, autorité locale | 3 | 3 | 3 |
| | | | | | |
| | | 4 - Personne morale privée à but lucratif : Algorithmes, banque commerciale, émetteur de chèques (services, repas, culture, écochèques, ...) | 7 | 1 | 1 |
| | | | | | |
| | | 5 - Personne morale privée à but non lucratif : Association locale, fondation, association loi 1901, ONG | 3 | 3 | 3 |

| | | | | | | |
|-----|------------------------------|--|---|---|---|---|
| | | 6 - Membre quelconque du système monétaire : membre de l'Association de crédit mutuel, bénéficiaire d'une prestation dans un système banque du temps (SEL, Accorderies, Time Banking) | 0 | 2 | 7 |  |
| - 2 | 2 - Centralisation | 1 - Centralisé : Emission par une entité unique sur un territoire donné | 7 | 1 | 1 |  |
| | | 2 - Mixte : Centralisé / Décentralisé | 3 | 3 | 3 | |
| | | 3 - Décentralisé : Emission par plusieurs entités sur le territoire | 2 | 3 | 4 |  |
| - 2 | 3 - Intérêt financier | 1 - à But Lucratif | 8 | 0 | 1 | |
| | | 2 - à But non lucratif mais d'intérêt pour les membres uniquement | 2 | 3 | 4 |  |
| | | 3 - à But non lucratif et d'intérêt général | 0 | 5 | 4 |  |
| - 2 | 4 - Gouvernance | 1 - Autocratique : les dirigeants prennent leurs décisions en dehors de tout mandat | 9 | 0 | 0 | |
| | | 2 - Technocratique : dirigeants agissant de manière discrétionnaire et indépendante dans le cadre d'un mandat | 7 | 1 | 1 | |
| | | 3 - Automatique : par application automatique des règles contractuelles : exemple : smartcontracts (accord d'utilisation) | 3 | 3 | 3 | |
| | | 4 - Démocratique : participation, représentation des utilisateurs, représentation des corps sociaux, interactions avec l'autorité mandatée en amont de l'institution monétaire | 1 | 3 | 5 |  |
| | | 5 - Collaborative : participation de l'ensemble des acteurs (décision directes, sociocratie...) | 0 | 4 | 5 | |

| | | | | | | |
|-----------------------------------|---|---|---|---|---|--|
| | | 6 - Coopératif et systémique : par amélioration systématique des règles contractuelles définies par processus collaboratif (sociocratie, holocratie,...) | 0 | 4 | 5 | |
| 5 - Arguments de confiance | 1 - Légaux et institutionnels (organisme public) | 5 | 2 | 2 | | |
| - 2 | 2 - Contractuels : entre personnes privées | 5 | 1 | 3 | | |
| | 3 - Démocratiques | 3 | 3 | 3 | | |
| | 4 - Symboliques : la puissance de l'armée, le roi, la religion, gaïa, etc... | 3 | 3 | 3 | | |
| | 5 - Economiques : la stabilité économique ou monétaire, la capacité financière, l'exploitation des ressources naturelles | 5 | 1 | 3 | | |
| | 6 - Sociaux : l'intégration et la stabilité sociale. Bien être et progression individuelle | 1 | 1 | 7 | | |
| | 7 - Ethiques : justice, morale, spirituel, apprentissage, respect des droits et liberté de l'individu, respect de la vie, etc... | 1 | 4 | 4 | | |
| | 9 - Techniques liés aux supports et aux systèmes de paiement (anti-fraude, protocoles, algorithmes, etc.) | 3 | 3 | 3 | | |
| | 10 - Systémique : relatif à un système reconnu pertinent dans son ensemble | 3 | 3 | 3 | | |

| Thème | Caractéristique | Elément | M3 | M7 |
|------------|--|------------------------------|----|----|
| | 3 - Règles émission / rémission | | | |
| - 3 | 1 - Modalité d'émission | 1 - Crédit | 8 | 0 |
| | | 2 - Echange monétaire | 6 | 0 |

| | | | | | | |
|--|---------------------------------|---|---|---|---|---|
| | | 3 - Prestation de contrepartie | 5 | 1 | 3 | |
| | | 4 - Crédit mutuel | 2 | 3 | 4 | |
| | | 5 - Don monétaire / création suivie generis | 2 | 3 | 4 |   |
| | | | | | | |
|  | 2 - Condition d'émission | 1 - Conditions financières : garantie, taux d'intérêts | 8 | 0 | 1 | |
| - 3 | | 2 - Conditions d'usage / d'affectation | 3 | 3 | 3 |  |
| | | 3 - Conditions liées à la contrepartie : solvabilité, majorité,.. | 3 | 3 | 3 |  |
| | | 4 - Critères de localisation : monnaie locale | 3 | 3 | 3 |  |
| | | 5 - Systématique : lié au système que l'on utilise | 3 | 3 | 3 |   |
| | | | | | | |
|  | 3 - Outil de flétrage | 1 - actions réglementaires et prudentielles (réserves obligatoires, limitations diverses) | 7 | 0 | 2 | |
| - 3 | | 2 - actions par les taux d'intérêt - repurchase agreement (prise en pension) | 7 | 0 | 2 | |
| | | 3 - actions sur la masse monétaire - achat et vente de titres publics (QE : Quantitative Easing) | 6 | 0 | 3 | |
| | | 4 - actions sur la masse monétaire - achat/vente de titres privés | 8 | 0 | 1 | |
| | | 5 - actions sur la masse monétaire - financement direct de projets | 3 | 3 | 3 |  |
| | | 6 - actions sur la masse monétaire - Don aux autorités publiques | 3 | 3 | 3 | |
| | | 7 - actions sur la masse monétaire - Don aux particuliers (hélicoptère monétaire) | 4 | 0 | 5 |  |

| | | | | | |
|--|---|---|---|---|---|
| | 8 - création de substituts monétaires (monnaie locale, monnaies fléchées, etc..) | 3 | 3 | 3 |  |
| | 9 - pas concerné par le flechage | 7 | 0 | 2 | |
| 4 - Bénéficiaire initial | 1 - Autorité publique supranationale | 7 | 1 | 1 | |
| - 3 | 2 - Autorité publique nationale (Parlement, Gouvernement, Administration publique) | 6 | 1 | 2 | |
| | 3 - Autorité publique régionale ou locale | 3 | 3 | 3 |  |
| | 4 - Personne morale privée à but lucratif (entreprise) | 8 | 0 | 1 | |
| | 5 - Personne morale privée à but non lucratif (ASBL) | 0 | 5 | 4 | |
| | 6 - Personne physique quelconque du système monétaire | 0 | 0 | 9 |  |
| 5 - Modalité de l'émission initiale | 1 - Emission ponctuelle suite à une décision unilatérale du régulateur | 7 | 1 | 1 | |
| - 3 | 2 - Emission ponctuelle suite à une décision démocratique du régulateur | 5 | 2 | 2 |  |
| | 3 - Emission suite à la décision d'achat d'actifs financier ou réel par l'émetteur | 9 | 0 | 0 | |
| | 4 - Emission suite à la livraison d'un travail ou d'une ressource matérielle ou naturelle à la demande de l'émetteur | 5 | 0 | 4 | |
| | 5 - Emission à la demande de conversion d'une autre monnaie | 7 | 0 | 2 | |
| | 6 - Emission à la demande des emprunteurs sur décision de l'organisme de crédit | 6 | 0 | 3 | |

| | | | | | |
|---|--|---|---|---|---|
| | 7 - Emission à flux constant par un algorithme défini par le législateur (sans conditionalité) | 4 | 1 | 4 | |
| | 8 - Emission à flux déterminé une conditions prévue par le législateur et vérifiées par un algorithme (smartcontracts) | 5 | 0 | 4 |  |
| | 9 - Emission suite à la mise sur le marché d'une grandeur physique (temps, ressources naturelle, etc...) | 1 | 4 | 4 | |
| <hr/> | | | | | |
|  - 3 | 6 - Souveraineté / dépendance monétaire | 1 - monnaie souveraine avec couverture en garantie (obligation ?) | 7 | 0 | 2 |
| | 2 - monnaie souveraine supranationale avec cours légal | 6 | 0 | 3 | |
| | 3 - monnaie souveraine nationale avec cours légal | 5 | 1 | 3 | |
| | 4 - monnaie complémentaire avec cours légal & taux de change fixe | 3 | 3 | 3 |  |
| | 5 - monnaie complémentaire avec réserve (couverture) en monnaie souveraine 1:1 (substitut monétaire 1:1) | 5 | 2 | 2 | |
| | 6 - monnaie supplémentaire avec taux de réserve (taux de couverture) en monnaie souveraine fixé inférieur à 1 pour 1 (substitut monétaire 1<1) | 3 | 3 | 3 | |
| | 7 - monnaie supplémentaire avec taux de réserve libre et taux de change fixe | 2 | 3 | 4 | |
| | 8 - monnaie supplémentaire avec taux de réserve libre et taux de change libre | 1 | 1 | 1 | |

| | | | | | | |
|-----|---|---|---|---|---|---|
| | | 10 - monnaie alternative : non reliée à la monnaie souveraine (taux de couverture faible voire nulle, crédit mutuel ou un critère non monétaire : temps) | 1 | 3 | 5 | <input checked="" type="checkbox"/> |
| |  7 - Type de couverture | 1 - monnaie sans contrepartie | 2 | 2 | 2 | <input checked="" type="checkbox"/> |
| - 3 | | 2 - Contrepartie métallique : Or ou argent | 3 | 3 | 3 | |
| | | 3 - Contrepartie réelle en autre bien réel et tangible : terres, ressources non renouvelables, etc. | 3 | 3 | 3 | |
| | | 4 - Contrepartie financière en une monnaie souveraine ou un panier de monnaies | 9 | 0 | 0 | |
| | | 5 - Contrepartie financière en titre de dette publique et autres dettes d'état | 8 | 0 | 1 | |
| | | 6 - Contrepartie immatérielle : travail, prestation, socialement ou écologiquement bénéfique... | 0 | 4 | 5 | <input checked="" type="checkbox"/> |
| |  8 - Fonction monétaire | 1 - Réserve de valeur avec intérêt (RVi) | 6 | 0 | 3 | <input checked="" type="checkbox"/> |
| - 3 | | 2 - Réserve de valeur sans intérêt (RV) | 5 | 2 | 2 | <input checked="" type="checkbox"/> |
| | | 3 - Unité de compte (UC) | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
| | | 4 - Moyen de paiement uniquement (MP) | 3 | 3 | 3 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> |
| | | 5 - Moyen de gouvernance sociétale (monnaie fléchée) | 0 | 5 | 4 | <input checked="" type="checkbox"/> |
| |  9 - Fonction de financement principal | 1 - Financement de l'économie (FEC) | 9 | 0 | 0 | |
| - 3 | | 2 - Financement de l'action de l'Etat ou de projets (FET) | 4 | 2 | 3 | |
| | | 3 - Financement de la restauration écologique (FRE) | 0 | 8 | 1 | |

| | | | | | |
|--|--|---|---|---|---|
| | 4 - Financement de la restauration sociale (FRS) | 0 | 2 | 7 | |
| | 5 - Fonction de paiement | 5 | 0 | 4 |   |
|  10 - Destruction monétaire - 3 | 1 - Réciprocité : Remboursement de la dette (Débit, monnaie à somme nulle, crédit mutuel) | 6 | 0 | 3 | |
| | 2 - Réciprocité : Contre-don (théorie de Marcel Mauss), contre-prestation | 1 | 2 | 6 | |
| | 3 - Décision politique : Fonte monétaire, Intérêts négatifs, dépréciation monétaire programmée | 1 | 4 | 4 | |
| | 4 - Décision politique : Retrait de la monnaie par l'autorité publique via la fiscalité | 5 | 0 | 4 |  |
| | 5 - Décision politique : Retrait de la circulation monétaire par une autre décision (p.e. reconversion obligatoire dans une nouvelle monnaie) | 5 | 0 | 4 | |
| | 6 - Reconversion : Conversion sur base d'un taux de change | 3 | 3 | 3 | |
| | 7 - Reconversion dans une autre monnaie avec rédimage fixé a priori (frais) | 2 | 3 | 4 | |
| | 8 - Autre : Monnaie non convertible (monnaie-temps, monnaie complémentaire non reconvertisible en monnaie domestique) | 0 | 2 | 7 | |
| | 9 - Pas de destruction monétaire volontaire | 5 | 2 | 2 |  |
|  11 - Confiance - 3 | 1 - Règles changeantes inconnues de tous (gré à gré ou système monétaire mafieux) | 9 | 0 | 0 | |
| | 2 - Règles permanentes inconnues de tous | 9 | 0 | 0 | |

| | | | | | |
|---|--|---|---|---|--|
| | 3 - Règles changeantes connues de tous | 7 | 1 | 1 | |
| | 4 - Règles permanentes connues de tous | 3 | 3 | 3 | |
| 12 - Position dans la hiérarchie monétaire | 1 - Monnaie de réserve ultime : Dollars US, Rouble, Yuan, BitCoin, etc. | 9 | 0 | 0 | |
| - 3 | 2 - Monnaie souveraine : Euros, Yen, etc. | 6 | 0 | 3 | |
| | 3 - Monnaie complémentaire ou supplémentaire : convertible en monnaie souveraine (franc CFA, Stable Coin, toute monnaie dépendante de la monnaie domestique, substitut monétaire) | 4 | 0 | 5 | |
| | 5 - Monnaie non convertible ou convertible partiellement en monnaie souveraine | 4 | 1 | 4 | |

| Thème | Caractéristique | Elément | M3 | M7 |
|---------------------------------------|---|---------|----|----|
| | 4 - Règles d'utilisation | | | |
| 1 - Conditions à l'utilisation | 1 - Monnaie à usage spécifique : aide sociale, utilisable dans certains magasins, réservées à certains produits (échopées), certains services (titres-services, miles d'avions, tickets restaurant) ou monnaie fléchée | 0 | 4 | 5 |
| - 4 | 2 - Monnaie à usage restreint : permet d'acheter tous types de biens et services (restriction sur le montant, le lieu, temporalité, adossée à une autre monnaie, SEL, etc.) | 3 | 3 | 3 |

| | | | | | | |
|-----|---|--|---|---|---|--|
| | 3 - Monnaie à usage universel complet : permet d'acheter tous types de biens et services monnaie souveraine (y compris JEU : Jardin d'Echange Universel, ...) | 7 | 1 | 1 | | |
| - 4 | 2 - Convertibilité | 1 - Convertibilité libre et générale vers une autre monnaie souveraine avec un taux de change de marché | 9 | 0 | 0 | |
| | 2 - Convertibilité vers d'autres monnaies souveraines moyennant certaines restrictions (taux de change réglementé, serpent monétaire, quantités limitées, conditions personnelles du détenteur (entreprise, particulier) et autres par la réglementation) | 8 | 0 | 1 | | |
| | 3 - Reconversion vers la monnaie d'adossement , moyennant certaines règles (frais de reconversion, règle de redimensionnement, limitation des quantités, etc...) | 7 | 1 | 1 | | |
| | 4 - Inconvertibilité d'une monnaie souveraine | 2 | 0 | 7 | | |
| | 5 - Inconvertibilité d'une monnaie adossée | 2 | 1 | 6 | | |
| - 4 | 3 - Valorisation extrinsèque | 1 - Valeur de marché (offre / demande) : taux de change variable | 9 | 0 | 0 | |
| | 2 - Taux de change réglementés : serpent monétaire | 8 | 0 | 1 | | |
| | 3 - Taux de change fixe | 6 | 0 | 3 | | |
| | 4 - Taux de change dégressif : fonte monétaire | 5 | 1 | 3 | | |
| | 5 - Aucune valorisation extrinsèque | 0 | 4 | 5 | | |
| - 4 | 4 - Restriction spatiale | 1 - Couverture mondiale : DTS, BTC, Eth | 9 | 0 | 0 | |
| | 2 - Zone monétaire : Euro | 8 | 0 | 1 | | |

| | | | | | | |
|--|--|---|---|---|---|-------------------------------------|
| | 3 - National : monnaie nationale (Franc, Dollar) | 7 | 1 | 1 | <input checked="" type="checkbox"/> | |
| | 4 - Régional : monnaie régionale (Eusko) | 6 | 1 | 2 | <input checked="" type="checkbox"/> | |
| | 5 - Local : monnaie locale | 3 | 3 | 3 | | |
| | 6 - Hyper-local : une fête, un événement, un club, lieu unique, prison | 2 | 1 | 6 | | |
|  - 4 | 5 - Restriction temporelle | 1 - Monnaie ponctuelle ou à durée de vie limitée par une date de péremption (chèque-repas, tickets-boissons) | 8 | 0 | 1 | |
| | 2 - Monnaie dont la durée de vie est programmée : monnaie créée par le crédit (crédits circulants) ou monnaie fondante (destructible) | 6 | 0 | 3 | | |
| | 3 - Monnaie permanente dont la durée est théoriquement illimitée : Bitcoin, Monnaie créée par le don ou l'échange de devises (monnaies qui ne possèdent pas un mécanisme de destruction endogène) | 4 | 0 | 5 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> | |
| | 4 - Monnaie permanente dont la durée est physiquement illimitée : Or, Argent, Platine, ... | 4 | 1 | 4 | | |
|  - 4 | 6 - Restriction sociale | 1 - monnaie utilisée par tous les groupes sociaux | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
| | 2 - monnaie interne à plusieurs groupes sociaux ou communautés | 4 | 2 | 3 | | |
| | 3 - monnaie interne à un groupe social ou une communauté | 3 | 1 | 1 | <input checked="" type="checkbox"/> | |
|  - 4 | 7 - Anonymat à la détention (hors détenteur du compte) | 1 - Pas d'anonymité | 9 | 0 | 0 | <input checked="" type="checkbox"/> |
| | 2 - Anonyme vis-à-vis des tiers, sauf les teneurs de compte (banque) et l'autorité publique | 7 | 0 | 2 | | |

| | | | | | | |
|---|--------------------------------|---|---|---|---|---|
| | | 3 - Anonyme vis-à-vis de tous tiers, sauf les teneurs de compte (banque) | 5 | 0 | 4 | <input checked="" type="checkbox"/> |
| | | 4 - Anonyme à l'égard de tous tiers sauf décision de justice | 5 | 0 | 4 | |
| | | 5 - Anonyme à l'égard de tous les tiers | 0 | 0 | 9 | |
| | | <hr/> | | | | |
|  | 8 - Anonymat de la transaction | 1 - Pas de transaction anonyme : transparence ou KYC (Know Your Customer) | 9 | 0 | 0 | |
| - 4 | | 2 - Transaction anonyme pour les tiers, les dépositaires de compte, l'autorité publique et les parties intermédiaire à la transaction | 3 | 0 | 6 | |
| | | 3 - Transaction anonyme pour tous les tiers, sauf les teneurs de compte (banque) et l'autorité publique | 6 | 0 | 3 | |
| | | 4 - Transaction anonyme pour tous les tiers (y compris autorité publique), sauf les teneurs de compte (banque) | 4 | 0 | 5 | |
| | | 5 - Transaction anonyme pour tous les tiers, sauf par décision de justice | 3 | 0 | 6 | |
| | | 6 - Transaction traçable mais anonyme à l'égard de tous tiers | 4 | 0 | 5 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> |
| | | 7 - Transactions anonymes pour tous les tiers : non traçable | 9 | 0 | 0 | |
| | | <hr/> | | | | |
|  | 9 - Intérêts créditeurs | 1 - monnaie porte un intérêt : instrument d'épargne et d'accroissement de la valeur | 7 | 0 | 2 | |
| - 4 | | 2 - la monnaie ne porte pas intérêt : strict instrument de paiement | 3 | 3 | 3 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> |

| | | | | | | |
|-----|--|--|---|---|---|---|
| | | 3 - La monnaie porte un intérêt négatif : surestarie - instrument accélérateur de l'économie, monnaie fondante | 5 | 0 | 4 | |
| | 10 - Condition sur la transaction | 1 - existe des règles plafonnant les montants versés | 5 | 4 | 0 | |
| - 4 | | 2 - existe un seuil de déclaration à l'administration | 6 | 0 | 3 | |
| | | 3 - existe une limite d'ordre technique ou physique (ex : payer avec 1 tonne de plume, contrainte sur la masse monétaire) | 2 | 6 | 1 | |
| | | 4 - aucune contrainte particulière | 5 | 0 | 4 |   |
| | 11 - Condition sur la détention | 1 - aucune contrainte particulière | 7 | 0 | 2 | |
| - 4 | | 2 - Restriction sur le montant détenu (plafonné) | 2 | 7 | 0 | |
| | | 3 - Restriction sur la durée de détention (monnaie fondante) | 9 | 0 | 0 | |
| | | 4 - Restriction sur l'accès à l'emprunt : nécessite un montant minimum fixe ou proportionnel à la valeur de l'emprunt | 7 | 1 | 1 | |

| Thème | Caractéristique | Elément | M3 | M7 | |
|-------|--|---|----|---|---|
| | |    | | | |
| |  5 - Monnayage | | | | |
| | 1 - Support matériel | 1 - monnaie marchandise (sel, bétail, coquillage...) | 0 | 3 | 6 |
| - 5 | | 2 - monnaie métallique (or, argent) | 4 | 1 | 4 |
| | | 3 - monnaie fiduciaire (billets) | 6 | 1 | 2 |
| | | | |  | |

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|---|--|---|---|---|---|
| | 4 - monnaie scripturale (écriture dans un livre de compte numérique ou réel : papier) | 6 | 0 | 3 | <input checked="" type="checkbox"/> |
| | 5 - monnaie électronique (écriture dans un livre de compte numérique) | 7 | 0 | 2 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> |
| 2 - Type de certification | 1 - Certifié par l'émetteur - processus interne | 6 | 0 | 3 | <input checked="" type="checkbox"/> |
| - 5 | 2 - Certifié par l'émetteur - processus interne avec validation par un certificateur externe (audit & contrôle) | 5 | 0 | 4 | |
| | 3 - Certifié par un tiers contrôleur (suivant des modalités prédéfinies) - processus externe | 5 | 0 | 4 | |
| | 4 - Certifié par un algorithme certificateur : le système | 5 | 1 | 3 | <input checked="" type="checkbox"/> |
| | 5 - Certifié par une règle intrinsèque au système (pas besoin de processus de certification en tant que tel : signature manuelle dans les transaction en JEU (Jardin d'Echange Universel) par exemple ou signature électronique) | 6 | 1 | 2 | |
| 3 - Forme juridique du certificateur | 1 - Organisation internationale de droit public | 4 | 1 | 4 | |
| - 5 | 2 - Organe public : banque centrale, Etat, monnaie royale, autorité locale | 5 | 1 | 3 | <input checked="" type="checkbox"/> |
| | 3 - Organe privé à but lucratif : Banques commerciales, entreprises | 9 | 0 | 0 | |
| | 4 - Organe privé à but non lucratif : associations, fondations, mutuelles... | 1 | 4 | 4 | |
| | 5 - Algorithme privé : Crypto développée par une entreprise commerciale sous brevet ou copyright | 6 | 0 | 3 | |

| | | | | | | | |
|------------|---|--|---|---|---|---|---|
| | 6 - Algorithme public : CBDC | 7 | 0 | 2 | | | |
| | 7 - Algorithme ouvert (open source / non propriétaire) : Bitcoin, Eth... | 0 | 4 | 5 |  | | |
| - 5 | 4 - Attribut de la confiance méthodique | 1 - Caractéristiques du support monétaire | 8 | 0 | 1 |  | |
| | | 2 - Caractéristiques du moyen de stockage | 3 | 3 | 3 |  | |
| | | 3 - Confiance physique / connaissance de la personne (KYC : know Your Customer) | 3 | 2 | 4 | | |
| - 5 | 5 - Valorisation Intrinsèque | 1 - Valorisation symbolique : monnaie fiat | 5 | 1 | 3 |  |  |
| | | 2 - Unité physique : Or, Argent | 1 | 5 | 3 | | |
| | | 3 - Unité temporelle : temps | 1 | 2 | 6 | | |
| | | 4 - Ressource naturelle : pétrole, etc... | 2 | 5 | 2 | | |
| - 5 | 6 - Stockage et détention | 1 - Centralisée | 6 | 1 | 2 | | |
| | | 2 - Mixte | 3 | 3 | 3 |  | |
| | | 3 - Décentralisé | 0 | 4 | 5 |  | |
| - 5 | 7 - Supports technologiques des transactions | 1 - Physique : pièces, billets | 4 | 1 | 4 | | |
| | | 2 - Dématérialisé | 6 | 1 | 2 | | |
| | | 3 - Technologique | 3 | 3 | 3 |  |  |
| - 5 | 8 - Garantie d'anonymat de la transaction | 1 - Non garanti | 8 | 0 | 1 | | |
| | | 2 - Garanti par la législation (exemple : RGPD) | 4 | 1 | 5 | | |
| | | 3 - Garanti par l'anonymisation technique des données (totale ou partielle) | 2 | 1 | 6 |  | |

| | | | | | | |
|-----|---|---|---|---|---|-------------------------------------|
| | | 4 - Garanti par le support monétaire anonyme (billets et pièces) | 1 | 0 | 8 | <input checked="" type="checkbox"/> |
| |  9 - Garantie de fin de transaction | 1 - Aucune garantie | 0 | 0 | 0 | |
| - 5 | | 2 - Garantie de gré à gré (bilatéral) | 1 | 1 | 1 | |
| | | 3 - Garantie par le système de transaction ou le socle technique | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
| | | 4 - Garantie par les autorités détentrices des 2 parties | 4 | 2 | 3 | <input checked="" type="checkbox"/> |
| |  10 - Inflation / déflation | 1 - Inflationiste | 8 | 0 | 1 | |
| - 5 | | 2 - monnaie à caractère relatif | 5 | 1 | 3 | <input checked="" type="checkbox"/> |
| | | 3 - Neutre (ou ajustable dynamiquement) | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
| | | 4 - Déflationiste | 1 | 2 | 3 | |

| Thème | Caractéristique | Elément | M3 | M7 |
|-------|--|---|----|----|
| | |    | | |
| |  6 - Fonctionnement | | | |
| |  1 - Coût du système de paiement | 1 - Impression de document | 5 | 0 |
| - 6 | | 2 - Matériel Actif (TPE, DAB...) | 4 | 1 |
| | | 3 - Infrastructure réseau | 4 | 1 |
| | | 4 - Bâtiments, bureaux, ... | 4 | 1 |
| | | 5 - Employés | 2 | 1 |
| | | 6 - Terminal, téléphone, tablette, PC | 5 | 0 |
| | | 7 - Redevances (TVA, impôts) | 3 | 3 |

| | | | | | | |
|---|--------------------------------------|---|---|---|---|-------------------------------------|
| | | 8 - Coûts non justifiés (fraude) | 3 | 3 | 3 | |
|  | 2 - Impact énergétique direct | 1 - Impression de document | 3 | 2 | 4 | <input checked="" type="checkbox"/> |
| - 6 | | 2 - Matériel Actif (TPE, DAB...) | 4 | 1 | 4 | |
| | | 3 - Infrastructure réseau | 4 | 2 | 3 | <input checked="" type="checkbox"/> |
| | | 4 - Bâtiments, bureaux, ... | 3 | 1 | 5 | |
|  | 3 - Vitesse de circulation | 5 - Employés | 3 | 1 | 5 | <input checked="" type="checkbox"/> |
| - 6 | | 6 - Terminal, téléphone, tablette, PC | 5 | 0 | 4 | <input checked="" type="checkbox"/> |
| | | 1 - $V < \bar{V}$: Monnaie disponible > au besoin sur une période donnée : instrument de réserve | 4 | 1 | 4 | |
| | | 2 - $V = \bar{V}$: Monnaie disponible en adéquation au besoin sur une période donnée | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
| | | 3 - $V > \bar{V}$: Monnaie disponible < au besoin sur une période donnée : monnaie rare | 7 | 0 | 2 | |
|  | 4 - Nature du volume | 1 - Volume fixe | 9 | 0 | 0 | |
| - 6 | | 2 - Volume limité à terme | 7 | 1 | 1 | |
| | | 3 - Volume variable en fonction de règles internes | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
| | | 5 - Volume à décroissance constante (monnaie fondante) | 8 | 0 | 1 | |
| | | 6 - Volume à croissance constante (June) | 3 | 0 | 6 | <input checked="" type="checkbox"/> |
| | | 7 - Crédit mutuel : Somme totale nulle | 0 | 4 | 5 | |

| | | | | | | |
|--|---|--|---|---|---|---|
|  - 6 | 5 - Méthode d'évaluation du volume | 1 - Méthode comptable | 3 | 3 | 3 | |
| | | 2 - Banque centrale / solde : système bancaire | 4 | 2 | 3 | <input checked="" type="checkbox"/> |
| | | 3 - Méthode physique | 3 | 3 | 3 | |
| | | 4 - Solde du ledger (solde du livre de compte global) | 3 | 2 | 4 | <input checked="" type="checkbox"/> |
| | | 5 - Somme nulle | 3 | 3 | 3 | |
|  - 6 | 6 - Evaluation du volume | 1 - Volume / PIB | 7 | 0 | 2 | <input checked="" type="checkbox"/> |
| | | 2 - Volume / habitant (contributeur) | 3 | 1 | 5 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> |
| | | 3 - Volume de transactions | 7 | 1 | 1 | |
| | | 4 - Autre | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
| | | 5 - Aucun | 0 | 0 | 0 | |
|  - 6 | 7 - Confiance | 1 - confiance d'usage (utilisation répandue) | 3 | 3 | 3 | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> |
| | | 2 - confiance en la valeur intrinsèque du support (Or, ressource naturelle) | 4 | 1 | 4 | |
| | | 3 - confiance légale (paiement de l'impôts en monnaie) | 5 | 0 | 4 | |
| | | 1 - Offre / demande (créé par le marché) | 8 | 0 | 1 | <input checked="" type="checkbox"/> |
| | | 2 - valeur fixée (décisions politique, limitation sur les ressources disponibles) | 3 | 3 | 3 | <input checked="" type="checkbox"/> |
|  - 6 | 8 - Valorisation | 3 - intemporelle (valeur physique, temps, etc..) | 2 | 5 | 2 | |

| Thème | Caractéristique | Elément | M3 | M7 |
|-------|-----------------|---|----|----|
| | |    | | |

| 7 - Conséquences attendues / observées | | | | | | | |
|--|------------------------------|--|---|---|---|-------------------------------------|--|
| - 7 | 1 - Conséquences sociales | 1 - Incidence négative | 5 | 4 | 0 | | |
| | | 2 - Incidence négative mineure | 4 | 3 | 2 | | |
| | | 3 - Aucune incidence sociale | 3 | 3 | 3 | | |
| | | 4 - Incidence positive mineure | 3 | 2 | 4 | | |
| | | 5 - Incidence positive | 2 | 1 | 6 | <input checked="" type="checkbox"/> | |
| | | 6 - Incidence indéterminée | 1 | 1 | 1 | <input checked="" type="checkbox"/> | |
| | 2 - Conséquences écologiques | 1 - Incidence négative | 5 | 0 | 4 | | |
| - 7 | | 2 - Incidence négative mineure | 3 | 2 | 4 | <input checked="" type="checkbox"/> | |
| | | 3 - Incidence neutre, aucune incidence | 3 | 3 | 3 | | |
| | | 4 - Incidence positive mineure | 2 | 4 | 3 | | |
| | | 5 - Incidence positive | 1 | 6 | 2 | <input checked="" type="checkbox"/> | |
| | | 6 - Incidence indéterminée | 1 | 1 | 1 | | |
| - 7 | 3 - Conséquences économiques | 1 - Incidence négative (inflation, récession, déflation, décroissance) | 0 | 8 | 1 | | |
| | | 2 - Incidence négative mineure | 2 | 3 | 4 | | |
| | | 3 - Incidence neutre, aucune incidence | 3 | 3 | 3 | | |
| | | 4 - Incidence positive mineure | 4 | 2 | 3 | <input checked="" type="checkbox"/> | |
| | | 5 - Incidence positive (croissance) | 7 | 0 | 2 | <input checked="" type="checkbox"/> | |
| | | 6 - Incidence indéterminée | 1 | 1 | 1 | | |

