PArtecipazione e COnflitto
*** The Open Journal of Sociopolitical Studies***
http://siba-ese.unisalento.it/index.php/paco
ISSN: 1972-7623 (print version)
ISSN: 2035-6609 (electronic version)
***PACO*, Issue 13(1) 2020: 337-359**
DOI: 10.1285/i20356609v13i1p337

Published in March 15, 2020

Work licensed under a Creative Commons Attribution-Non commercial-Share alike 3.0 Italian License

EDITORIAL

RETHINKING MONEY, REBUILDING COMMUNITIES
A Multidimensional Analysis of Crypto and Complementary Currencies

Marco Fama
University of Calabria

Stefano Lucarelli
University of Bergamo

Ricardo Orzi
National University of Luján

ABSTRACT: In the current scenario of global crisis, our official monetary system's inadequacy to provide solutions to the numerous serious problems affecting our society has become increasingly evident. This has led to the emergence of an astonishing number of projects that aim to rethink money. In order to make sense of these projects, it is necessary to explore the deepest meanings of money, as a multidimensional institution whose concrete nature and functioning are still object of a whole set of unsolved disputes. Under these premises, this article proposes an interdisciplinary reading of crypto and complementary currencies. The goal is twofold: on the one hand, the authors aim to shed light on the conditions which have to be met for the establishment of a sustainable monetary innovation; on the other hand, the article constitutes an attempt to use ongoing experiences as a lens through which to gain new insights into the general phenomenon of money and as a laboratory for exploring the possibility to move towards new socio-economic paradigms.

PACO, ISSN: 2035-6609 - Copyright © 2020 - University of Salento, SIBA: http://siba-ese.unisalento.it

KEYWORDS:
Money, Monetary Innovation, Complementary Currencies, Crypto Currencies, Clearing Systems

CORRESPONDING AUTHORS:
Marco Fama, marco.fama@unical.it; Stefano Lucarelli, stefano.lucarelli@unibg.it; Ricardo Orzi, ricardoorzi@gmail.com

1. Introduction

After a first wave of creation during the Eighties, an astonishing variety of experiences of monetary innovation – variously labelled as complementary, community, social, local and crypto currencies – has emerged in the last few years, especially after the outbreak of the 2007 financial crisis (see Blanc, Fare, and Lafuente-Sampietro 2020; Amato and Fantacci 2013).

Complementary Currencies (CCs) are generally portrayed as tools able to enhance the resilience of local communities, increasing the level of economic activity, trust and cooperation among its users. Yet, ongoing experiments are still too marginal and its meso-economic and long term effects largely uninvestigated. Furthermore, it is not easy to provide an exhaustive and coherent description of the phenomenon, notwithstanding the increasing number of both theoretical and empirical studies published. In part, this is also due to the lack of a common terminology and to the persistence of a whole set of unsolved methodological controversies.

In seeking to solve these problems, various proposals for classification have been made. Some taxonomies focus on operational mechanisms, based on aspects such as issuing procedures, space of circulation and convertibility to the official currency (Fare and Ahmed 2014; Martignoni 2012; Bode 2004). Others mainly focus on the goals pursued, the symbolic dimension and the vision of the actors involved (Boonstra, Klamer, Karioti, Do Carmo, and Geenen 2013; Dittmer 2013; Blanc 2011). Others still try to combine the different approaches, with the aim to account for the complex and multidimensional nature of the phenomenon (Bindewald, Nginamau, and Place 2013; Seyfang and Longhurst 2013; DeMeleuneure 2008; Kennedy and Lietaer 2004).

Indeed, more than an obstacle to comprehension, the lack of a common analytical framework can be an opportunity to enrich the debate. Furthermore, as suggested by Jerome Blanc (2011), taxonomies should always be flexible enough to leave room for the inclusion of new original experiences.

Major problems arise with regards to the evaluation of the impact produced by each particular project. From a methodological point of view, the main obstacle lies in the difficulty to develop indicators that are able to simultaneously grasp the multiple facets of a phenomenon whose economic dimension is inextricably merged with the

social and the symbolic ones[1]. In an attempt to develop standardised procedures through which to compare the diverse ongoing experiences and to provide useful guidance for practitioners and policymakers, innovative and sophisticated evaluation methods have been elaborated (Place 2018; Seyfang and Longhurst 2016; Moyer 2015; Place and Bindewald 2015; Nakazato and Hiramoto 2012; Seyfang 2006).

In any case, evaluation models should not be limited to the identification of quantitative variables and indicators, but attempt to bring to light the multiple social and political implications of the phenomenon also through qualitative research based on an interdisciplinary approach. At the same time, it needs to be recognised that the analysis of a social phenomenon, far from being a neutral representation of it, is part of a process that contributes to build it as a socio-political object (Doria and Fantacci 2017). Taxonomies and evaluations entail the choice of criteria which are always imbued with particular visions of the world, although they may acquire a scientific legitimacy as long as they reach consensus within a given community. This is hardly the case of a phenomenon such as CCs, which calls into question a whole set of unsolved disputes concerning the nature of money.

This picture becomes even more complicated with Bitcoin's appearance on the scene in 2009 and the resulting growing diffusion of crypto currencies. Along with it, new research problems arise which deserve to be carefully considered both from a sociological and an economic standpoint.

Up until now, there has generally been a clear distinction between research which focuses on the economic, social, legal and political effects of CCs and that which aims to assess the implications of crypto currencies' spread. By closely examining both streams of literature, a preliminary hypothesis can be made: while CCs tend to arise in response to circumstances in which monetary instruments for transactional purposes become scarce – as in the classic case of Wir described by Studer (2006) –, crypto currencies seem to be inspired by the desire to find new financial assets that remain outside the control of traditional monetary authorities and can be used for speculative purposes (Baek and Elbeck 2015; Chea and Fry 2015; Fama, Fumagalli and Lucarelli 2019; Kaitazi and Moro 2019). A clear case in favour of this hypothesis is the fact that, at the moment, the only possible solution for regulating the latter seems to be to push

[1] In this sense, some approaches suggest treating these new monetary phenomena by problematising their complexity as "total social facts", in the way Marcel Mauss categorised them, as "an activity that has implications throughout society, in the economic, legal, political, and religious spheres". This approach questions the dominant knowledge in economics theory today that treats money as "neutral".

their users to buy crypto currencies directly issued by the Central Banks, instead of those offered by existing platforms (Bech and Garrat 2017).

Considering all of the above, a whole range of questions surrounding the nature and the possible implications of ongoing experiences of monetary innovations can be posed: Are we facing new types of currency? Or would it be more appropriate to consider them as credit relations? Where a speculative motive prevails, wouldn't it be more reasonable to merely talk about financial assets? Can the operating rules on which these instruments are based affect the functioning of our socio-economic system, and if so, how? How important is trust for the viability of crypto and complementary currencies? Do these phenomena represent a real innovation, and, if so, which are the conditions required for their long-term sustainability? Can these instruments support the transition towards new techno-economic paradigms? Do they have the potential to challenge the existing notion of monetary sovereignty and to give rise to a new way of considering the monetary policies? How does the economic dimension of these phenomena relate to the other relevant social and institutional dynamics which lie behind money? [2]

In seeking to answer some of these questions, this special issue aims to nourish the academic and public debate on monetary innovations with both theoretical and empirical analysis based on a multidisciplinary approach integrating sociological, political and economic perspectives. The overall goal is not to simply provide a further interpretation of the phenomena of crypto and complementary currencies, but to use them as a lens through which to gain new insights into the general phenomenon of money and as a laboratory for exploring the possibility to move towards new socio-economic paradigms.

2. Money as a multidimensional phenomenon

Existing theories about the origins and the concrete nature of money are highly conflictive. Indeed, as pointed out by Éric Tymoigne and Larry Randall Wray (2007, 4), the

[2] Similar questions already emerged in the analysis proposed by Lucarelli (2016) and represent one of the main focuses of MINTS, the Observatory on "Monetary Innovation, Technology and Society" recently established at the Baffi-Carefin Centre of the Bocconi University (http://www.bafficarefin.unibocconi.eu/wps/wcm/connect/Cdr/Baffi_Carefin/Home). Further elements to integrate the debate trough a perspective more focused on the Global South can be found, among others, in Orzi 2012.

origins of money "are lost in the mist of time", so that we will never be able to exactly know them. Furthermore, the phenomena which we seek to describe by using the word "money" may differ widely in its meaning. As shown by historians and anthropologists, the nature of money has profoundly changed across time and space (Graber 2011; Le Goff 2010; Polany 1977; Mauss 1914). We must therefore avoid the risk to reproduce ethnocentric or anachronistic assumptions and recognise that money is imbued with a set of symbolic, social and political meanings that widely change according to the specific context. At the same time, it is necessary to go beyond the mainstream economic theory which considers money as a simple medium of exchange[3].

As stressed by Ingham (2004), this theory entails a "category error" following which specific *forms* of money have been used to sustain general assumptions. Among others, this generates a misleading identification between money and credit – a mistake that, as we will see, must be avoided when thinking about the design of a CC.

As a matter of fact, our current notion of money is strictly tied to the specific role that this plays in a capitalist economy, to be understood as a *monetary economy of production* (Keynes 1963), i. e. as a system in which economic behaviours are oriented towards the accumulation of money. From a Marxian perspective, it is important to stress that in a monetary economy of production (M-C-M') those who control money also have the power to determine the conditions and the social ends of the production. Far from representing a simple purchasing power, capitalistic money provides its holder with the possibility to exercise a social command (Graziani 1990, 29)[4], thereby affecting the main economic and social variables in both quantitative and qualitative terms.

[3] Carl Menger, who deeply influenced the Austrian School as well as the bedrock of the monetary theories elaborated by Ludwig Mises and Friedrich Hayek, provided a most widespread – although wrong – explanation of the origin of money, which can be summarised as follows: if the conditions of interpersonal exchange are such that indirect exchange simplifies the transactions, and if people recognise these advantages, indirect exchange and money come into being.

[4] See also the very peculiar theoretical and militant experience represented by the 1973-1978 workgroup on money of the journal *Primo Maggio.* As stressed by Lucarelli (2013), the *Primo Maggio workgroup* (Fabio Arcangeli, Roberta Bartolini, Andrea Battinelli, Lapo Berti, Sergio Bologna, Serena Di Gaspare, Franco Gori, Christian Marazzi, Marcello Messori, Mario Zanzani) aimed to change the social role of political intellectuals by innovating the methodology of historiography, sociology, economics and political science. The research work discussed the Marxian analysis of money in relation to the theoretical and political impulses provided by the monetary disorder of the 1970s. The contributions of the workgroup (Berti 1978) clarified that monetary and credit policy has repercussions in terms of reorganisation of the social productive texture. It highlighted how monetary command has political implications on class composition as well.

From a quantitative point of view, the endogenous money theories and the monetary policy indications they provide (Arestis and Sawyer 2006) are important to mention. These theories argue that the money supply is not entirely determined by monetary authorities, provided that it is mainly the result of a banking system where central banks act as a lender of last resort and where the control of the latter can be eluded thanks to private banks' possibility to create new money assets[5].

Focusing on the qualitative impact that money has on social relations it rather calls into question a whole range of sociological and psychological issues, requiring a close inspection of the dynamics which have historically underpinned the transition towards new socio-economic regimes[6].

In this respect, it is worth mentioning that before the establishment of the metal standard, in Europe and elsewhere, "there were in common use large quantities of private metal tokens against which the governments made constant war with little success" (Innes 1913). Recent research has produced further evidence of the fact that monetary systems prior to the gold standard were characterized by the coexistence of multiple currencies (Kuroda 2008; Amato and Fantacci 2013), and that in pre-modern and modern history the sovereign's monopoly over money issuance was frequently challenged by financial and credit innovations carried out by proto and private bankers. This dynamic also resulted in the emergence of a range of complementary monetary circuits built on different principles (Fantacci 2005).

According to these pieces of research, and contrary to the mainstream idea (Menger 1892), money, *as we know it*, is not just a simple veil of exchanges which has emerged as a cost-reducing innovation to replace barter. It rather represents the result of a historical process of transformation which affected society as a whole[7].

[5] Neocartalism, as inspired by Knapp, can be considered as a peculiar reinterpretation of the endogenous money theory, based on the idea that people work in order to earn the money they need to meet tax obligations (see Mosler 1997; Wray 2012). Along this line, in order to overcome the budget constraint imposed to the countries of the EMU, Forstater (2018) suggests the creation of complementary currencies directly issued by local governments and accepted by them for tax payment.

[6] Upon closer inspection, this is a step made also by Joseph Alois Schumpeter (1911), who, in reasoning on the credit nature of money, ended up refusing the mainstream theory. Gradually distancing himself from the latter, Schumpeter started to focus on the relations between innovative entrepreneurs and other social groups. He even predicted the future overcoming of capitalism and the birth of a sort of socialism based on big companies (Schumpeter 1942).

[7] It could still be conceived as a veil, but in the sense that it conceals the existing dynamics of power and class, being a fundamental element of what Karl Marx (1990 [1867], 165) defines as "commodity fetishism".

The transition from a "real-exchange economy" to a "monetary economy" (Keynes 1963, 7) was marked by highly intensive social and institutional conflicts. Furthermore, as explained by Karl Polany (1944), with the birth of capitalism money has gone through a deep transformation. As in the case of labour, whose price is constituted by the salary and in that of the land, which finds its price in the rent, money has been endowed with a "market price", which is represented by the interest. This dynamic, according to Polanyi, has been a pivotal axis of the mechanism through which the economy has been "disembedded" from society.

The idea that this process can somehow be reversed, and that new monetary instruments are needed in order to bolster the re-embedding of the economy, is precisely what inspired the birth of many CC projects.

Against this background, a first question that arises is whether, and under what conditions, an interest-free money can emerge within the current economic system. As has been observed by different scholars and activists, this would imply the diffusion of monetary instruments which are not convenient to hoard by design, such as demurrage-based money or a currency which is meant to exclusively work as a unit of account in a clearing system (see Braga and Fumagalli 2015).

As is well known, the principle of clearing was at the very centre of the project of monetary reform elaborated by Keynes, who was acutely aware of the limits of our official monetary system. It is not by coincidence that Keynes' ideas constitute the ground of most of the CC analysed in this issue. From an economic point of view, the tangible benefits which could derive from the diffusion of interest-free CCs are undisputable (see Lucarelli and Gobbi 2016). A different set of questions that arise is: how does the technical design of a CC – whether or not based on the clearing mechanism – is related to the other multiple dimensions of money? Which are the social and institutional conditions required for the establishment and the long-term viability of a CC? Which are the wider socio-economic implications deriving from the development of a CC projects?

A last preliminary issue which calls for attention relates to the utter importance of rethinking money and dedicating our efforts to elaborating new monetary solutions. This involves being aware of the fact that a relevant portion of the problems that affect our society, and the global democracy level, are intrinsically related to the functioning of our official monetary system (see Gallino 2011, 2013; Perna 2014). In this scenario, it is fundamental to understand whether, and how, new forms of interaction between the economy and society can concretely emerge as a result of the diffusion of new

monetary tools. In other terms, it is about exploring the deepest implications deriving from money circulation, focusing on the interaction between money and existing social structures.

In this regard, there is a general lack of agreement in sociological theories which focus on the nature of money in modern society. At the risk of simplification, two main opposite schools of thought can be identified. The first one conceives money as a projection of the dominant values and power hierarchies, and as a tool through which social relations are increasingly colonised by the logics of profit and economic rationality. The second one hinges on the idea that even capitalistic money tends to be imbued with multiple meanings, acting as a vehicle of a changing set of symbolic, relational and cultural dynamics (Zelizer 2012, 2010, 1994).

One of the main problems of these two perspectives lies in the fact that they both fail to recognise the dialectical relationship between money and social behaviour. To be sure, the concept of money is always rooted in a given system of thought. Pre-existing structures of power and dominant values are embedded in money, but they are also reproduced and expanded through its use. As argued by Georg Simmel (1978 [1900], 177), money acts as a "claim upon society" and is concretely translated into tools that, being endowed with specific features, function as rules informing economic decisions. At the same time, economic activities are part of wider "relational work" in which money, in the "creative effort people make establishing, maintaining, negotiating, transforming, and terminating interpersonal relations" (Zelizer 2012, 6), can be charged with different meanings and used to facilitate exchanges that are not necessarily impersonal and profit-oriented.

In order to move forward in this debate, we could think of money as a "social bond" (Orzi 2012; Orléan 1992) which, by connecting people and enabling new forms of collective action, set the scene for the transformation of the existing social configurations. At the same time, money is a bond in the sense that it shackles human agency to specific forms and contents. By expanding society and creating links among different communities, monetary relations challenge existing social boundaries, rules and hierarchies (Polany 1977; Mauss 1914). They also allow individuals to express their personal desires, enabling the social constitution of autonomous subjects (Simmel 1978 [1900]). Nonetheless, money frames the limits of sociality, allowing the translation of complex particular meanings into anonymous economic transactions.

Considering all of the above, projects that aim to rethink money cannot be considered as experiments simply driven by the purpose of better "greasing the wheels" of economic interactions. On the contrary, by calling into question the multiple dimen-

sions and implications of money, they have the potential to pave the way for the building of radically new way of organising our society.

3. The contribution of this special issue

The articles included in this volume provide both a theoretical and an empirical interpretation of ongoing experiences of monetary innovation, using them also as a lens through which to achieve a better understanding of the nature of money.

The article by **Carmelo Buscema** focuses on the mutual interaction between the social and institutional forces underlying monetary innovation and regulation. Through a genealogical approach focused on the history of the United States, Buscema shows that this interaction has always been driven by the interplay of power dynamics inspired by contrasting socio-economic needs and political goals. In this sense, it is important to distinguish the monetary initiatives undertaken at an institutional level from the bottom-up innovations that emerge "at the margin of the political structure governing society and of its regulative instruments". If the latter can be considered as "demand-driven" responses aiming to overcome the limits of the official monetary systems and to regain people's control over money, institutional initiatives are usually inspired by political strategies intended to regulate social transformations while preserving the existing power structures. The point made by Buscema is that money is an open battlefield, in which the dialectical interaction between innovation and regulation has deep geopolitical and socio-economic implications. Especially in the current context of global crisis, socio-technical innovations in the monetary field could play an important role in supporting virtuous mechanisms of wealth creation and distribution that better respond to local needs; however, their results will depend on a set of endogenous and exogenous factors, including institutional responses and political reactions. Furthermore, as Buscema points out, there is always a risk for monetary innovations to be subsumed into the logics of capital accumulation and to be used for pushing forward the so-called platform economy.

Undoubtedly, ongoing experiences of monetary innovation are not exempt from ambivalences and ambiguities. This is particularly true in the case of crypto currencies, as **Luigi Doria**'s contribution to this special issue illustrates. Deconstructing the "cybernetic ethos" underlying Bitcoin, Doria finds its roots in a techno-utopian vision that, in seeking to remove uncertainty and to absolutise the economic agents' autonomy by means of disintermediation and decentralisation, refuses to recognise that money is, above all, a social institution hinged on trust. Nevertheless, crypto currencies are en-

dowed with a peculiar social dimension which needs to be considered carefully. Indeed, according to Doria, Bitcoin's ideology brings to an extreme the dogma of calculability that is intrinsic to a specific way of considering – and prescribing – socio-economic interactions. Starting from reshaping the relationship between human and non-human agency, the Bitcoin imaginary points to "the purification of economic life from uncertainty through its purification from uncertain social relations". In other terms, by enabling the creation of "artificial spaces of certainty" and providing "automatic solutions to the non-predictability of socio-economic actions", the innovations introduced by Bitcoin would allow to move a further step towards the building of a de-socialised economic environment, in which hyper-autonomous and hyper-individualist agents can somehow be "protected from the dangerous relationship with social relations and institutions".

It is also true that in the last few years many innovative grassroots experiences have emerged that, in seeking to create more reliable and sustainable CC schemes, use cryptography and the blockchain technology within different conceptual frameworks. The possibility to fruitfully integrate these new technologies into participatory processes, in which decisions are collectively made in the light of shared meanings and goals, cannot be excluded (see Fama, Fumagalli and Lucarelli 2019). As shown by Doria, however, it is highly arguable that the technology introduced by Bitcoin can, in itself, provide valid solutions to "the many serious flaws of official money".

In more general terms, the possibility to overcome the limits of our official monetary system, far from being a simple technical task, requires our capability to reconsider the role played by money and the deepest meanings with which the latter, as a "social relation of credit and debt" (Ingham 2004, 12), is imbued. In this regard, currency projects inspired by the Keynes's idea of clearing – a recurring theme within this issue – show greater potential.

As recalled in the paper written by **Massimo Amato**, the monetary reform was deemed by Keynes as one of the main ways of "getting rid of many of the objectionable features of capitalism" (Keynes 1936, 221), this being based on a misleading identification between money and liquidity. Keynes' proposal to create an International Clearing Union represents precisely a first attempt to separate the latter from the former through a redefinition of both. This separation, as claimed by Amato, should also be a starting point for the institution of new forms of CCs operating at different local levels.

It is worth stressing that the aversion to uncertainty which characterises Bitcoin's ethos also plays a key role in the explanation of the "liquidity preference" provided by Keynes. Capitalism's response to uncertainty resulted in the pre-eminence of the store-of-value function of money. Yet, the propensity to hoard money only reproduces un-

certainty, provided that it negatively affects the *real economy* and engenders "asymmetrical power relationships between economic agents, namely between those who hold money and those who do not hold it but need it". Against this background, as suggested by Amato, it is necessary "to remove liquidity from money, but also to preserve liquidity" – as something that is different from the *liquidness* intrinsic to money – "in its proper function". Following Keynes's intellectual heritage, this would imply the creation of a money that "disappears when its work is done" (Keynes 1923, 124), i.e. of a *means of payment* that is not convenient to hoard by design, and that can hence be used to facilitate exchanges and to guarantee a proper equilibrium between debt and credit positions. This idea, whose theoretical and philosophical implications are here explored by Amato, is at the very centre of Keynes' project of monetary reform, but it also constitutes the ground of most of the complementary currency projects analysed in the other articles included in this issue.

The first one, written by **Giacomo Bazzani**, provides an empirical survey of Sardex, a well-known clearing- based CC operating in the Italian region of Sardinia since 2010. Through an original approach aimed at exploring the social impact of Sardex, and how this is related to the economic outcomes produced by the circuit, Bazzani demonstrates that CCs can be a tool "for enabling collective action oriented toward the production of common goods". This reverses the classic portrayal of CCs as a by-product of collective mobilisations oriented toward pre-fixed socio-political goals. The case of Sardex proves that CCs can, on the contrary, act as a trigger for new forms of participation to emerge, allowing different collective perceptions of the functioning of the economic system and of the relationships between individual economic activities and social well-being. The research carried out by Bazzani, in particular, shows that even those members who originally join Sardex for purely instrumental motivations start to see it as "a tool for directly intervening in redistributive processes and supporting the entire regional economy"; they come to consider their participation in the project as "something with clear and valuable collective goals" and to spontaneously work to promote the network, perceiving it as an instrument through which they "can influence monetary circulation in a way that could assist self-development within their region".

Along the same line, the article by **Marco Fama** and **Elena Musolino** shows that the possibility of CCs to trigger processes of social transformation is not necessarily linked to the existence of a well-defined community held together by pre-fixed meanings, goals and values. The latter can also emerge "as a result of a process of *learning by doing* in which monetary innovations, according to the way they are designed, serve as a laboratory which allows people to experiment new ways of combining social and economic interactions". Presenting the result of empirical research on Linx, one of the

eleven regional circuits of the Sardex network, Fama and Musolino show that the CC is enabling the diffusion of new forms of sociality and trust that are, in a sense, directly inscribed in the underlying clearing mechanism. The point made by the two authors is that the choice to adopt a particular technical solution in the development of a currency project has precise social implications, affecting the other conditions required for its possible institutionalisation. Indeed, the experience of Linx suggests that those ingredients which are generally identified as a prerequisite for a successful CC can, *vice versa*, gradually emerge as a consequence of the choice to use a well-designed monetary architecture, even in the case of top-down projects.

As stated by Fama and Musolino, "money is a complex institution hinged on a combination of inextricably merged social, economic and technical factors". Hence, paying attention to how these factors concretely interact, and to how technical innovations in the monetary field are related to the other dynamics underpinning social transformations, can help us achieve a better understanding of the limits and potentialities of ongoing CCs experiences. Nevertheless, it is important to keep in mind that currency projects must always be sustained by a whole set of tangible and intangible resources, and that the results of the adoption of a given monetary architecture may widely differ according to a number of contextual factors.

In this respect, **Laura Sartori**'s article is insightful. Through an informed comparison between Sardex and Liberex – another regional circuit of the Sardex network –, Sartori shows that under the same monetary architecture there may be "different understandings and behaviours, varying combinations of trust and social capital, empowerment and engagement, within the community". This is due to the fact that money, as a social and political construct, is "rooted in the institutional and relational contexts where it concretely operates". To be sure, the social dimension of money is strictly intertwined to the economic one, and both are related to the rules inscribed in the way any given monetary tool is designed. However, as observed by Sartori, "when the rules of the game are misunderstood, also the nature of money is misinterpreted and its sociological implications go unrecognised". More in general, it must be recognised that "money differs not only by nature and design, but also by context". Just as the sociality of money is affected by a number of relational and institutional factors, so is the possibility of a CC to last over the long term and to foster processes that re-embed the economy into social relations.

Further empirical elements to sustain this argument are provided by **Georgina Gómez** and **Cristina Medina Prado** in their prolonged analysis of Puma, a CC established in the Spanish city of Seville. Their article sheds light on the complex, and somehow troubled, social dynamics which lie behind the creation and the possible institu-

tionalisation of grassroots experiences of monetary innovation. As the authors observe, grassroots initiatives by definition are the result of spontaneous and fluid interactions based on shared meanings, trust and mutual recognition; however, when "they aim at persisting in time and expanding their social influence, they also require stable rules and regulations". Thus, a tension between institutionalisation and spontaneous interaction emerge which obliges grassroots' groups to cope with a set of dilemmas. Generally speaking, institutionalisation can imply identity loss, and the inclusion of new members into an existing social group, while renewing the internal energy and the creativeness, also tends to increase heterogeneity in values and cohesiveness. In the case of Puma, as Gómez and Medina Prado show, these dynamics led to a purposefully incomplete – or flexible – institutionalisation, aimed at establishing rules and governance mechanisms while, at the same time, preserving solidarity, identity and spontaneity. In this sense, the experience of Puma shows that organisations "can retain the way of life of the grassroots for a considerable time without moving towards further formalisation". The aforementioned tension, however, has important implications and may, in the long run, become unmanageable, leading to the demise of such projects.

Problems related to the establishment and sustainability of CCs are also analysed in the article by **Joselle Dagnes** and **Luca Storti,** who address them from a different angle, focusing on a failed attempt to establish a CC in the Aosta Valley, in Italy. As the authors show, monetary innovations are likely to be unsuccessful for a set of contingent and structural reasons, as their implementation requires a combination of many ingredients, including personal and institutional trust, transparency, cooperation among different actors, correct timing, well-defined goals and political priorities. Most importantly, the case analised by Dagnes and Storti suggests that social innovations are likely to perform better when based on a network composed of a "mixture of strong and weak ties" and that a "combination of instrumental and altruistic orientations might be better suited for helping bottom-up institutionalisation processes". This is particularly true in the case of CCs, where the capability of the promoters to fruitfully bind together the different – social, economic and symbolic – dimensions of money is crucial to enhance the inclusiveness and the long-term viability of their project.

The Aosta Valley case is extremely interesting, since it represents an attempt made by local politicians on an institutional level. Although there is no doubt that local administrations can play a pivotal role in implementing CC experiences (see Blanc and Fare 2013), this case shows that when entirely permeated by political dynamics, monetary innovations may lose connection with the social realities operating on the ground and become a mere object of rhetoric debates used to nourish competition instead of cooperation. Hence, according to Dagnes and Storti, when developing a CC, a balance

between various public and private actors is needed in order to favour the formation of a "heterophile and polycentric network" rooted in different social spheres.

It is worth stressing that political support towards CCs is, in general, still extremely scarce. Often, arising experiences of monetary innovation have to face several legal obstacles as well as an overall negative attitude from the side of government and national central banks. As observed in the article written by **Vadim Ljovkin** and **Anastasia Ljovkina**, this may be due to a common "misunderstanding of the CC's complementing nature" and to concerns related to the idea that the parallel circulation of different payment instruments could undermine the power that central authorities exercise through their monopoly over legal tenders. Yet, especially in the current global scenario, the public sector could learn important lessons by looking both at present and past experiences of monetary innovations which have been implemented in times of economic depressions and negative conjunctures. In this sense, a classical example is provided by the case of Wörgl, the Austrian town where a demurrage-based currency – an interest-free means of exchange with depreciate through time inspired by the theories of Silvio Gesell (1916) – was developed in 1932. Through a comparison between the Wörgl free shilling and a contemporary case of using Gesell money promoted by a Russian agricultural enterprise, Ljovkin and Ljovkina prove that monetary innovations can effectively contribute to overcoming socio-economic crises, allowing to "compensate inflexibility of world economy structure" and producing positive effects such as "decreasing unemployment, increasing turnover, stimulating business activities, developing infrastructure, paying off debts and improving social-economic atmosphere". The authors once again illustrate that the results produced by CCs depend on a whole set of historical, geographical, political and institutional circumstances. Nevertheless, their comparison also provides arguments that can be used to sustain the "universality and effectiveness" of Gesell's money *per se*, as a monetary tool that, irrespective of the implementation context, has "common types and qualitative characteristics of anti-crisis social-economic effects".

In conclusion, from different perspectives, each one of the contributions included in this issue further proves that money is a highly multidimensional phenomenon, in which a whole range of economic, social, symbolic and also technical factors come into play. Projects aiming to rethink money must be aware of this complexity and carefully consider how their potential outcomes are affected by the interaction of these different dimensions. CCs that are inspired by a clear vision of the limits of our official money and that pay great attention to the design of the underlying monetary architecture are certainly more likely to succeed. However, for them to be sustainable over the long-term a multitude of other social and institutional conditions have to be met. Past ex-

periments also show that monetary innovations which are not able to simultaneously ensure both tangible and intangible benefits to their users are doomed to remain marginal and to fail eventually. Unfortunately, this seems to be a common destiny for many of the over 5000 CCs projects currently operating worldwide. Yet, empirical evidence also suggests that there are concrete possibilities to fruitfully recombine the ingredients that constitutes money, and to create monetary tools that are able to support participatory processes enhancing trust and cooperation within the communities.

4. Final remarks

We have long been accustomed to consider money as something neutral. From the Seventies onwards in particular, social sciences have been deeply influenced by economic orthodoxy and the Chicago school's idea that money only has an impact on the level of prices, without affecting the real economy. In Milton Friedman's (1976, 283) words:

> There is a "natural rate of unemployment" at any time determined by real factors. This natural rate will tend to be attained when expectations are on the average realized. The same real situation is consistent with any absolute level of prices or of price change, provided allowance is made for the effect of price change on the real cost of holding money balances. In this respect, money is neutral.

Such a vision nourished the dominant opinion that monetary authorities should dedicate their efforts only to control inflation, and that money *per se* is irrelevant to aspects concerning the social well-being, the economic production and the rate of employment.

Against this dogmatic vision, Keynesian economists pointed out that money is always the result of a process of institutional building, and that in a monetary economy of production, such as is capitalism, money is far from being just a facilitator of exchanges. In fact, as we have repeatedly underlined, capitalist money functions also as a store of value that can be used for speculative purposes. From this perspective, the questions surrounding the proper and improper use of money, first raised by Aristotle, acquire a new centrality. As stated by Massimo Amato (2006, 6):

> What then is the proper use of money? Very simply, that use of money according to which exchanges can orderly occur according to a common measure, whose meaning is

> shared by the whole political community. The interesting point for our discussion is that this emphasis, which is very clear in Aristotle, is more or less identical in Keynes.

The orthodox understanding of money has also been criticised by scholars that, from an anthropological perspective, focus on the unfolding of the institutional processes in diverse settings. In this regard, it is worth stressing that, as observed by Bill Mauer (2006 30), "money 'works' because of its failures".

We can draw an important lesson from the experiences of monetary innovation analysed in this issue: money is an open battlefield, in which power relations are continuously redefined trough dynamics of participation and conflict. For this very reason, it would be a mistake to focus only on those experiments aimed at multiplying the monetary instruments (or quasi-money) currently available. In other terms, it is necessary to go beyond the vision of Friedrich A. Hayek which inspired the creation of many crypto currencies (see Fantacci (2019), and that the European Central Bank summarised as follows:

> One of the foremost names in this field is Friedrich A. Hayek. He wrote some very influential publications, such as Denationalisation of Money (1976), in which he posits that governments should not have a monopoly over the issuance of money. He instead suggests that private banks should be allowed to issue non-interest-bearing certificates based on their own registered trademarks. These certificates (i.e. currencies) should be open to competition and would be traded at variable exchange rates. Any currencies able to guarantee a stable purchasing power would eliminate other less stable currencies from the market. The result of this process of competition and profit maximisation would be a highly efficient monetary system where only stable currencies would coexist. (ECB 2012, 22).

Contrary to Hayek's proposal, it must be underlined that the unregulated dynamics of global competition could also determine an increasing concentration of power, leading to the emergence of new monopolies that might jeopardize democracy. This risk was also highlighted by the Nobel laureate Joseph Stiglitz (2009), through his work on information asymmetry and his commentaries on Facebook's intention to create its own crypto currency, known as Libra.

Now more than ever, it is pivotal to grasp the overall message provided by crypto and complementary currencies: our society is characterised by a deep dissatisfaction, rooted in different interest and social groups.

In this scenario, rethinking money *for* rebuilding communities can represent a common goal. There is a concrete risk that this goal may vanish due to the diffusion of

isolated and poorly coordinated attempts. Nevertheless, some important experiences of monetary innovation are also emerging, potentially inspired by the awareness of the real functions that money should fulfil in order to create a better world, where peace and mutual respect prevail. This is the *Eutopia* Keynes aspired to when he was pondering about the future of the international currency in Bretton Woods.

References

Amato M. (2006), “Notes on the (Im)proper Use of Money. From an Openly Hidden Tradition of Money-thinking”, XVI International History Conference, Helsinki (http://www.helsinki.fi/iehc2006/papers2/Amato.pdf). Accessed April 10, 2020.

Amato M., L. Fantacci (2012), *Fine della finanza*, Roma: Donzelli.

Amato M., L. Fantacci (2013), *Moneta Complementare. Sai cos’è?*, Milano: Bruno Mondadori.

Arestis P., Sawyer M. (2006), edited by, *A Handbook of Alternative Monetary Economics*, Cheltenham: Edward Elgar.

Baek C., Elbeck M. (2015), “Bitcoin as Investment or Speculative Vehicle? A First Look”, *Applied Economics Letters*, 22(1-3): 30-34.

Bech M., Garrat R. (2017), “Central Bank cryptocurrencies”, BIS Quarterly Review, September: 55,70.

Berti L. (1978), edited by, *Moneta, crisi e stato capitalistico*, Milano: Feltrinelli.

Bindewald L., M. Nginamau, and C. Place (2013), *Validating Complementary and Community Currencies as an Efficient Tool for Social and Solidarity Economy Networking and Development*. (http://www.unrisd.org/sseconf). Accessed October 26, 2019.

Blanc J., Fare M., and O. Lafuente-Sampietro (2020), *Les monnaies locales en France: un bilan de l’enquête nationale 2019-20*, Lyon: Triangle - UMR 5206, Université Lumière Lyon 2, Sciences Po Lyon.

Blanc J. (2011), “Classifying “CCs”: Community, Complementary and Local Currencies types and generations”, *International Journal of Community Currency Research*, 15: 4-10.

Bode S. (2004), Potentiale regionaler Komplementar währungen zur Förderung einer endogenen Regionalentwicklung. Thesis, Osnabrück University.

Boonstra L., A. Klamer, E. Karioti, J. Do Carmo, and S. Geenen (2013), *Complementary Currency Systems. Social and Economic Effects of Complementary Currencies*, Rotterdam: Erasmus University.

Braga E., A. Fumagalli (eds.). (2015), *La moneta del comune*, Milano: alfabeta2 and DeriveApprodi.

Chea E-T., Fry J. (2015), “Speculative Bubbles in Bitcoin Markets? An Empirical Investigation into the Fundamental Value of Bitcoin”, *Economics Letters*, 130: 32-36.

DeMeulenaere S. (2008), “2007 Yearly Report of the Worldwide Database of Complementary Currency Systems”, *International Journal of Community Currency Research,* 12: 2-19

Doria L., L. Fantacci (2017), “Evaluating Complementary Currencies: from the Assessment of Multiple Social Qualities to the Discovery of a Unique Monetary Sociality”, *Quality & Quantity*, 52: 1291-1314.

ECB (2012) *Virtual currency schemes*, European Central Bank, Frankfurt.

Fantacci L. (2019), “Cryptocurrencies and the denatiolization of money” *International Journal of Political Economy*, 48(2): 105-126.

Fantacci L. (2005), *Moneta. Storia di un’istituzione mancata*, Venezia: Marsilio

Fama M., Fumagalli A., and S. Lucarelli (2019), “Cryptocurrencies, Monetary Policy and New Forms of Monetary Sovereingty”, *International Journal of Political Economy*, 48(2): 174-194.

Fare M., P. Ould Ahmed (2014), *Complementary currency systems questioning social and economic changes*, (https://EconPapers.repec.org/RePEc:hal:wpaper:ird-01088492). Accessed February 15, 2020.

Forstater M. (2018) “Complementary Currencies in the Solidarity Economy: The Local Job Guarantee”. In: Murray M., Forstater M. (eds) Full Employment and Social Justice. Binzagr Institute for Sustainable Prosperity. London-New Yprok: Palgrave-Macmillan: 159-167.

Friedman M. (1976), *Inflation and Unemployment*, Nobel Memorial Lecture, December 13 (https://www.nobelprize.org/uploads/2018/06/friedman-lecture-1.pdf). Accessed April 10, 2020.

Gallino L. (2013), *Il colpo di stato di finanze e governi. L’attacco alla democrazia in Europa*, Torino: Einaudi.

Gallino L. (2011), *Finanzcapitalismo. La civiltà del denaro in crisi*, Torino: Einaudi.

Gesell S. (1916), *Die natürliche Wirtschaftsordnung durch Freiland und Freigeld*. Verlag für Sozialökonomie.

Graeber D. (2014), *Debt: The First 5000 Years*, London: Melville House.

Graziani A. (2003), *The Monetary Theory of Production*, Cambridge: Cambridge University Press.

Hayek F. A. (1976), *Denationalisation of Money*, London: Institute of Economic Affairs.

Ingham G. (2004), *The Nature of Money*, Cambridge: Polity.

Innes A. M. (1913), "What is money?", *The Banking Law Journal*, 30: 377-408.

Kajtazi A., Moro A. (2019), "The Role of Bitcoin in Well Diversified Portfolios: A Comparative Global Study", *International Review of Financial Analysis*, 61: 143-157.

Kennedy M., B. Lietaer (2004), *Regionalwährungen: Neue Wege zu nachhaltigem Wohlstand*, München: Riemann.

Keynes J.M. (2006), *Moneta Internazionale. Un piano per il commercio internazionale e il disarm finanziario*, edited by Luca Fantacci, Milano: Il Saggiatore

Keynes J. M. (1960) [1936], *The General Theory of Employment, Interest and Money*, London: Macmillan.

Keynes J.M. (1963), "On the Theory of a Monetary Economy", *Nebraska Journal of Economics and Business*, 2(2): 7-9.

Keynes J. M. (1923). *A Tract on Monetary Reform*, vol. 4 in Robinson, E. A. G. and Moggridge, D. (eds.), *The Collected Writings of John Maynard Keynes*, London: Macmillan, 1971–89.

Kuroda A. (2008), "What is the complementarity among monies? An introductory note", *Financial History Review*, 15(1): 7-15.

Le Goff J. (2010), *Le Moyen Âge et l'argent: Essai d'anthropologie historique*, Paris: Perrin.

Lucarelli S. (2013), "The 1973-1978 workgroup on money of the journal *Primo Maggio*: an example of pluralistic critique of political economy", *International Journal of Pluralism and Economics Education*, 4(1): 30-50.

Lucarelli S. (2016), "What Type of Monetary Sovereignty?" [Quelle souveraineté monétaire ?], *Multitudes*, 62(1): 193-201.

Lucarelli S., L. Gobbi (2016), "Local clearing unions as stabilizers of local economic systems: a stock flow consistent perspective", *Cambridge Journal of Economics*, 50(5): 1397–1420.

Martignoni J. (2012), "A new approach to a typology of complementary currencies", *International Journal of Community Currency Research*, 16(A): 1-17.

Marx K. (1990) [1867], *Capital. A Critique of Political Economy*, London: Penguin Books.

Mauer B. (2006), "The Anthropoly of Money", *Annual Review of Anthropoly*, 35: 15-36.

Mauss M. (1969) [1914], *Les origines de la notion de monnai*, in Œuvres, 2, Paris: Les Éditions de Minuit.

Menger K. (1892), "On the Origins of Money", *Economic Journal*, 2(6): 239-255.

Mosler W. (1997), "Full employment and price stability", *journal of Post-Keynesian economics*, 20(2): 167-182.

Moyer L. (2015), “An Impact Assessment Model for Web-Based Time Banks. Thought-Experiment in the Operationalization of Social Capital”, *The Journal of Sustainable Development*, 14(2): 106-125.

Nakazato H., and T. Hiramoto (2012), “An Empirical Study of the Social Effects of Community Currencies”, *International Journal of Community Currency Research*, 16(D): 124-135.

Orléan A. (1992), “La monnaie comme lien sociale”, *Genèses* (8): 86-107.

Orzi R. (2012), *Moneda Social y Mercados Solidarios II: La moneda social como lazo social*, Buenos Aires: CICCUS.

Perna T. (2014), *Monete locali e moneta globale*, Milano: Altreconomia.

Place C. (2018), “Impact Assessment of Monetary Innovation: Sustainability with Existing Frameworks and Integral Approach”, *International Journal of Community Currency Research*, 22(Winter): 74-88.

Place C., L. Bindewald (2015), “Validating and Improving the Impact of Complementary Currency Systems through Impact Assessment Frameworks”, *International Journal of Community Currency Research*, 19(Summer): 152-164.

Polanyi K. (1944), *The Great Transformation*, Boston: Beacon Press.

Polanyi K. (1977), *The livelihood of man*, New York: Academic Press.

Seyfang G. (2006), “New Institutions for Sustainable Consumption: An Evaluation of Community Currencies”, *Regional Studies*, 40(7): 781-791.

Seyfang G., N. Longhurst (2013), “Growing green money? Mapping community currencies for sustainable development”, *Ecological Economics*, 86: 65-77.

Seyfang G., N. Longhurst (2016), “What Influences the Diffusion of Grassroots Innovations for Sustainability? Investigating Community Currency Niches”, *Technology Analysis & Strategic Management*, 28(1): 1-23.

Simmel G. (1978) [1900], *The Philosophy of Money*, London: Routledge.

Schumpeter J.A. (2003) [1942], *Capitalism, Socialism and Democracy*, London: Routledge.

Schumpeter J.A. (1934) [1911], *The Theory of Economic Development,* Cambridge, Mass: Harvard University Press.

Stiglitz J. (2019), “Why Facebook’s Libra currency gets the thumbs down”, *The Gurdian*, July 2 (https://www.theguardian.com/business/2019/jul/02/why-facebook-libra-currency-gets-the-thumbs-down). Accessed April 10, 2020.

Studer T. 2006 [1998], *Wir and the National Swiss Economy*, Basel: The Wir Bank.

Tymoigne É., L. R. Wray (2007), “Money: An Alternative Story”, in Arestis P., M. C. Sawyer (eds.), *A Handbook of Alternative Monetary Economics*, Richmond Hill: Firefly Books.

Wray R. (2012), *Modern Money Theory: A Primer of Macroeconomics for Sovereign Monetary Systems*, London-New York: Palgrave-Macmillan.

Zelizer V. (1994), *The Social Meaning of Money*, New York: Basic Books.

Zelizer V. (2010), *Economic Lives*, Princeton: Princeton University Press.

Zelizer V. (2012), "How I Became a Relational Economic Sociologist and What Does It Mean?", *Politics and Society*, 40(2): 145-174.

Articles published in this Special Issue

Buscema C. (2020), "Geopolitics of Monetary Innovation in the Long Durée. Financialization, Digitalization and the Crisis of the Global Hegemony", *Partecipazione e conflitto*, 13(1):

Doria L. (2020), "The Cybernetic Ethos of Cryptocurrencies: Economic and Social Dimensions", *Partecipazione e conflitto*, 13(1):

Amato M. (2020), "The Nature of Money in a Clearing System. From liquidity to liquidness", *Partecipazione e conflitto*, 13(1):

Bazzani G. (2020), "Money as a Tool for Collective Action", *Partecipazione e conflitto*, 13(1):

Fama M., and E. Musolino, "Complementary Currencies as a Socio-technical Innovation. Evidence from a Local Clearing Union in Italy", *Partecipazione e conflitto*, 13(1):

Sartori L. (2020), "The Social Life of Sardex and Liberex: Kin or Acquaintances? A Comparison Between Two Mutual Credit Circuits in Italy", *Partecipazione e conflitto*, 13(1):

Gómez G., and C. Medina Prado (2020), "The Flexible Institutionalization Process of Puma Currency in Seville, Spain", *Partecipazione e conflitto*, 13(1):

Dagnes J., and L. Storti (2020), "Establishing or Failing? That is the (Puzzling) Question. An Attempt to Introduce a Complementary Currency", *Partecipazione e conflitto*, 13(1):

Ljovkin V. E., and A. O. Ljovkina A.O. (2020), "Bashkir Wörgl: Successful Rescue of a Local Agricultural Business with Gesell's Money. Implementing Gesell's Money for Saving the Agricultural Enterprise from the Bankruptcy in Russia", *Partecipazione e conflitto*, 13(1):

Articles published in this special issue:

Amato M. (2020), "The Nature of Money in a Clearing System. From Liquidity to Liquidness", *Partecipazione e conflitto*, 13(1): 409-437.
Bazzani G. (2020), "Money as a Tool for Collective Action", *Partecipazione e conflitto*, 13(1): 438-461.
Buscema C. (2020), "Geopolitics of Monetary Innovation in the Longue Durée. Financialization, Digitalization and the Crisis of the Global Hegemony", *Partecipazione e conflitto*, 13(1): 360-383.
Dagnes J. and L. Storti (2020), "Establishing, or Failing? That Is the (Puzzling) Question. An Attempt to Introduce a Complementary Currency", *Partecipazone e conflitto*, 13(1): 540-563.
Doria L. (2020), "The Cybernetic Ethos of Cryptocurrencies: Economic and Social Dimensions", *Partecipazione e conflitto*, 13(1): 384-408.
Fama M. and E. Musolino (2020), "Complementary Currencies as a Socio-Technical Innovation. Evidence from a local clearing union in Italy", *Partecipazione e conflitto*, 13(1): 462-486.
Gómez G.M. and C. Medina Prado (2020), "The Flexible Institutionalization Process of Puma Currency in Seville, Spain", *Partecipazone e conflitto*, 13(1): 514-539.
Ljovkin V.E. and A.O. Ljovkina A.O. (2020), "Bashkir Wörgl: Succesfsful Farm Rescue. Implementing Gesell Money in the Shaimurat Farm, Russia, *Partecipazione e conflitto*, 13(1): 564-585.
Sartori L. (2020), "The Social Life of Sardex and Liberex: Kin or Acquaintances? A Comparison Between Two Mutual Credit Circuits in Italy", *Partecipazione e conflitto*, 13(1): 487-513.

AUTHORS' INFORMATION:

Marco Fama (PhD) is a Post-Doc Researcher at the University of Calabria and an Adjunct Professor of Economic Sociology at the University of Bergamo. He was Visiting Researcher at the International Institute of Social Studies of Erasmus University Rotterdam and at Centro de Estudios Sociológicos, Universidad Nacional Autónoma de México. His wide research interests include: microfinance, international cooperation, poverty reduction policies, monetary innovations, rural development and environmental issues. He authored the book (in Italian) *The government of poverty at the time of (mi-*

cro)finance (Verona: ombre corte), and published numerous articles in Italian and international journals.

Stefano Lucarelli is Associate Professor in Economic Policy at the University of Bergamo. His research projects include institutional economics, cognitive capitalism, monetary theory of production, financialisation and complementary currencies. He has been involved as invited researcher at CNRS in Paris in the D-CENT European Project (2013-2016) and in the DECODE European Project (2017-2020). He published various articles in Italian and International journals. His latest book (in Italian) is: *Squilibrio. Il labirinto dello della crescita e dello sviluppo economico* (co-author Roberto Romano, Roma: Ediesse).

Ricardo Orzi is Associate Professor at the National University of Luján (UNLu), and teaches graduate seminars at the University of Buenos Aires (UBA), Quilmes (UNQ) and General Sarmiento (UNGS). He holds a PhD in Social Anthropology (FyL - UBA). He is a member of the Latin American Network of Researchers in Social and Solidarity Economy (RILESS), and RAMICS (Research association on Monetary Innovation and Community and Complementary Currency Systems). He carried out research on alternative monetary systems and solidarity markets in Latin America and Europe. His latest book is: *Moneda Social y Mercados Solidarios II: La moneda social como lazo social* (Buenos Aires: CICCUS)