The complementary currency systems: a tricky issue for economists

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Abstract:

By complementary currency systems (CCS) we mean a specific unit of account that complements the official currency and has been developed on a group of agents that have formed a network or operate in a defined territory, with a view to accounting for and regulating exchanges of goods and services. Despite the topicality and the number of CCS, economists seem apparently pays only marginal attention to them. This article suggests that economics is based on a particular methodological and epistemological approach and on theoretical and normative conceptions of money that prevent it from taking into account the CCS's practices, their logics and their impacts. Their diversity and their relative new emergence confront economics to a methodological problem of impact studies. Because of their limited validity, the CCS tend to be considered as peripheral and transitional. Last, we show the obstacles that prevent monetary theories to recognize and legitimate them.

Keywords :

Money, Currency, convertibility, effect size, impact studies, territory

By complementary currency systems (CCS) we mean a specific unit (or system) of account that complements the official currency and has been developed on the initiative of a group of agents (individuals, enterprises, NGOs, associations, foundations) that have formed a network or operate in a defined territory, with a view to accounting for and regulating exchanges of goods and services.

Complementary Currency Systems (CCS) are by no means new to history; since the 1980s they have been attracting more and more attention and growing apace in developed as in developing economies. In the current state of the question, we have only estimates – in most cases debatable – of their extension; their diversity has been overlooked. According to our sources, some 3,500 to 4,500 systems have so far been recorded in more than 50 countries (Blanc, 2006; Seyfang and Longhurst, 2013a)[1]. Among the better-known are the LETS in Canada and the United Kingdom (Lee, 1996; North, 2006; Williams, 1996a, 1996b, 1996c, 1996d), the time banks in Italy and the UK (Coluccia, 2001; Seyfang, 2006b), the barter clubs in Argentina (Gomez, 2009, Ould Ahmed, 2010), the Ithaca Hour in the United States (Collom, 2005; Douthwaite, 1996; Jacob et al., 2004), the Regiogeld and the Chiemgauer in Germany (Gelleri, 2009; Thiel, 2012), the community development banks in Brazil (Borges, 2010; Melo et al., 2009; Neiva et al., 2013), the SOL in France (Fare, 2010, 2011), the Brixton pound, The Stroud Pound and the Bristol pound in the UK (Ryan-Collins, 2011; Scott Cato and Suárez, 2012), the WIR-type systems in Switzerland (Stodder, 2009), and the Accorderies in Quebec and in France (Comeau and Boulianne, 2012; Fare, 2011). The CCS are very diverse in their nature and their objectives, their concepts, their forms and modes of monetary governance, and the degree of their articulation to political and economic institutions (table 1). Nevertheless they share common objectives*:* those of supporting territorial socio-economic and political dynamics, of setting up new economic practices based on new standards (ethical, environmental, solidarity) and of promoting empowerment. They also challenge, from a theoretical point of view, the role and place of money in the economy.

Despite the topicality and the number of CCS, economists seem apparently pays only marginal attention to them, when it pays any attention at all, if we are to judge by the tiny volume of publications on the subject. This lack of interest is all the more puzzling as these new monetary systems deal with major economic topics and problems: markets, money, the price-setting mechanisms, values, economic governance, to mention only the most obvious.

Why do these CCS not appeal more to economists? We will attempt in this article to answer this question. We will suggest that conventional economics is based on a particular methodological and epistemological approach and on theoretical and normative conceptions of money – its essence, size, status, and monetary regulation – that prevent it from taking into account the CCS's practices, their logics and their impacts. In a first section, we will see that their diversity and their relative new emergence confront economics to an upstream methodological problem of measure and of impact studies. The second section shows that, because of their limited validity in time and in space, the CCS tend to be considered as peripheral and transitional. The last section shows the obstacles that prevent monetary theories to recognize and legitimate them.

A problem of measure and of evaluation of their impact

CCS seem, because of their very diversity and the fact that they have emerged only relatively recently, to pose a methodological problem to economics. They have not yet been thoroughly studied; there is no database to document their development, characteristics, specific logics and quantitative and qualitative features. Econometric studies not being practicable, it is difficult to account properly for individual behaviour, quantitative aspects and the logics in operation. This is why fieldwork to be undertaken, to obtain data through analyses of impacts. Theoretical work on CCS is still a minority concern, however, as Ryan-Collins (2011) has pointed out. This can be explained, in our opinion, by a need to distance oneself in time: so many monetary innovations, so different from one another. A lot of empirical research will be needed before a theory can be formulated convincingly.

Furthermore, the lack of directly usable data, there is an important diversity of contexts that give rise to CCS and of socio-economic profiles of the actors involved, and of the logics. They are differing in their political and ideological bases, theoretical reasoning, modes of governance, the material form of their currency, and their connexion with the official currency system. CCS are created in geographical contexts: in the countries of the South they often emerge in reaction to an economic crisis, and concern population strata suffering from high degrees of social insecurity. These strata are usually impoverished and their support for CCS springs mainly from economic needs. In contrast, CCS that emerge in Northern countries are linked to more varied social strata, and the motivations concerned are more diverse (not only economic, but also environmental or ideological). They have a plurality of aims – single or multiple: economic, social, environmental, political (empowerment). Furthermore, for within a certain level, the economic one for example, their objective can be very different. While some systems, such as Ithaca money in the US (Douthwaite, 1996) are oriented towards the local productive apparatus, and employment, production and local dynamics, others target growth in sustainable consumption, such as the "green points" customer fidelity cards in the NU-Spaarpass in Rotterdam (Sambeek and Kampers, 2004), in the SEL (Laacher, 2003; Servet, 1999), on time banks and LETS (Seyfang, 2003, 2006a), and on SOL in France and Accorderie in Quebec (Fare, 2011).

This heterogeneity constitutes a genuine methodological problem to evaluate the meaning and the impact of CCS. In development economics, researchers first make field surveys known as randomised control trials before moving on to impact studies [cf. The approach of Duflo and her J-PAL team (Abdul Latif Jameel Poverty Action Lab), a research network specializing in randomized evaluations of social programs] (Banerjee and Duflo, 2011). Evaluation by randomized control is thus aimed at "establishing a credible comparison group, a group of individuals who, as there is no programme, would have given rise to results similar to those displayed in the programme" (Duflo, 2005: 188). Using this "control group" one can compare the effects on individuals of a programme, project or policy that is being envisaged. Surveys of this type usually aim at measuring the effects of a given programme in terms of monetary poverty at the individual level, without taking into account the relevant structural and institutional conditions. This method, despite its current vogue, is limited in its effects. It predetermines the objectives to be reached, then compares the results obtained with these objectives, but without discerning other effects that might have affected the people involved in the process being examined. This factor underlies (and undermines) efforts to establish direct causal links between the effects and the programme, and to neutralise the context in which it is being effectuated. Causality cannot be treated probabilistically when the context makes generalisation problematic. This method takes into account only the average impact, without capturing the diversity of effects, and does so in the short term (Labrousse, 2010), hiding ripple effects and those of learning, composition and imitation (Bédécarrats et al., 2013). Furthermore, no explanation is given of the reasons, processes and causal mechanisms involved, the whys and the wherefores. It establishes only causal links between the programme and the effects. Yet the factors involved are multiple, as are the interactions. Effects resulting from interactions between multiple factors are always situated socially and bear the stamp of the context in which they take place. As a result, causal links should be examined in all their complexity, with dynamic interactions being grasped in context, and institutional and socio-economic dimensions taken into account. The effects of a programme cannot be defined uniquely in terms of predetermined objectives, nor can they be summarised by accumulating quantitative data unaccompanied by explanations.

These stumbling blocks in the way of true understanding make it necessary to adopt an alternative method to conduct field surveys using for instance socio-economic and economic-anthropological methods (quantitative and qualitative by means of individual and/or collective interviews and surveys conducted by means of questionnaires). A methodological approach of this sort seems to be helpful to reveal the multidimensional nature, the logics and the impacts of the monetary facts and practices being examined. It mobilises a comprehensive set of tools, starting with observation of monetary practices, and progressively formulating theoretical concepts and elaborating them on the basis of experience. This orients research towards production of highly contextualised primary data generated directly by the actual practice of fieldwork. The current field surveys on CCS that emanates from economic geography, socioeconomics and institutional economics, use a methodological approach of this sort. To evaluate the impact of CCS, they adopt diverse criteria, as their relevance is tied to forms and objectives that are proper to each system. For example, to measure their ability to avoid social and economic exclusion, two criteria are usually adopted: direct creation of jobs at local level, and the increase in economic, social and human capital held by persons in a situation of exclusion. Seyfang (2003) adopted another one that is the ability of CCS to enable users to assert their rights as citizens: social rights (integration into networks, bonds of reciprocity), economic rights (having an income; receiving recognition in work; consuming; saving), and political rights (participating in public and associative decision-making). Fare (2011) keeped three multi-dimensional criteria: territorialisation of activities (localisation of exchanges, creation of social links, participation in democratic process); intensification of the dynamics of exchange (development of access to credit, empowerment, struggle against poverty), and transformation of practices, lifestyles and social representations (responsible consumption, ecological citizenship, making organisations responsible, valorising the capacities of each and everyone, and collective empowerment).

A problem of viability: the limited purchasing power of money

Money used to be defined in economics as the instrument of exchange: recognized and accepted by all agents for trade. In the beginning there was barter, money then appeared as a means of resolving the famous problem of the double coincidence of needs. In other words, money is thought of as an invention of the market economy aimed at overcoming barter. It is important to underline that this monetary genesis is totally in line with this previous monetary approach. If money is defined as a pure economic object, as an instrument of exchange, its genesis stems from an entirely functional model: there is a logistic problem to solve, and the appropriate device will be invented accordingly (Ould Ahmed, 2010). The story of the double coincidence of needs is a classic explanation of the emergence of money. It can be found as early as 1776 (Smith, 1995), then in 1892 (Menger), and persists implicitly today in models of pure monetary theory (Kiyotaki and Wright, 1993; Williamson and Wright, 1994), despite a wide consensus among historians, anthropologists, heterodox economists, and sociologists of money refuting this imaginary genesis of money (Aglietta and Orléan, 1998, 2002; Davies, 1994; Innes, 1913; Ingham, 2000; Servet, 2001; Testard, 2001; Théret, 2007).

Therefore, money is perceived as is a universal means of payment: that is its value. It constitutes a promise of goods to its holder. However, CCS have essentially a limited liberatory power: they are *special purpose currencies*, according to the terminology of Polanyi (2008). Indeed, they are valid only for pre-defined uses in space and in time.

A limited purchase power in market spaces

In the first place, they have territorial limits: they can be used only in a specific geographical area). They can also be limited to a particular community (Blanc, 2002): the circulation and value of currencies have to be validated by voluntary adherents of the systems. The community or association in question has to be set up *for* the money, which is created by a citizens' movement (Blanc, 2013).

Furthermore, certain currencies, used for the purchase of specific goods and services, can be used only by certain categories of the population. Some initiatives, for example in France with local currencies (the *Abeille,* the *Mesure,* the *SOL Violette,* etc.), promote direct consumption towards socio-economic partners who respect social and environmental criteria that have been incorporated into a charter after application of selection criteria (Blanc and Fare, 2013b). Although these charters often appear rather than a banner, they affirm the values and the symbolic universe of the payment community.

The liberatory power of these currencies can be narrowed still further by rules of usage and mechanisms of monetary creation and regulation. Most CCS in circulation are not convertible into official currencies. Local currencies (often in paper or electronic), however, assume a possibility of conversion, in particular because they integrate into the circuit agents of the production and distribution of goods and services. A fixed relation of equivalence is set up to link the local to the national currency, and both can be used at the same time. Entry into the local system from the national one is possible by converting one currency into the other, but exit from the system is not always possible; when it is, it only for professionals; penalties are attached to exit (in the form of conversion tax) to limit risks of mass sell-offs of the local money (e.g. the Brixton Pound in UK, the *Abeille* in France).

Due to the limitation of their purchasing power and the low number of their users and of volume of trade they engender, these currencies are all “small-scale” (see Table 2). Despite the growth in the number of users as their development, most CCS remain “niche” involving relatively few people with a notable exception, however: the Argentine barter clubs, which at one time concerned 2.5 million people (Gomez, 2009). Thus Seyfang and Longhurst (2013b) see CCS as socio-technical niches, “local grassroots innovations” springing from citizens’ initiatives experimenting with alternative lifestyles and sustainable practices that are able to grow and influence society on a broader scale. It is also important to stress that unlike the CCS that have economic objectives, those that have social aims do not necessarily seek to expand their scale of application. This is the case in particular with the French SEL (Laacher, 2003; Servet, 1999) and also with some Japanese local currency systems, the *chiiki tsûka* (Hirota, 2006; Nakazato and Hiramoto, 2012). Thus, as far as economics is concerned – it usually operates on a far grander scale – CCS tend to be seen as peripheral, too insignificant to make much difference in the dynamics of the overall economy.

However, their validity can be advantageous in terms of territorial development. Indeed in the restricted territorial in which they can be used, these currencies can have a beneficial effect on local economies, affecting them in an endogenous manner (consumption inside a local monetary and territorial space; creation of resources and of new outlets and of jobs), promoting a development model based on micro-entrepreneurs and extra-economic values. The combination between microcredit and local currency, as in the Brazilian experiment, constitutes a particular powerful tool in development by financing productive activities inside the territory and improving the local supply. Use of a local and territorial currency can also strengthen local community links and local identity as for example by community development banks in Brazil (Neiva et al., 2013).

Some conditions could lead to increase or improve their territorial economic effects. First, the size of the experiment (Gomez, 2012): when the size is too small, its impact remains marginal, as is shown in Aldrige et al. (2003), who deal with LETS in the UK. The size of the scheme depends on the actors involved, and on their diversity. Local authorities can also play a decisive role (Blanc and Fare, 2013a). The recognition of the social utility of CCS by public authorities and economic decision-makers would increase their potential influence on the entire socio-economic system. For example, local authorities could accept the payment for public services or payment of local taxes with the local currencies (it is already the case with the Bristol Pound in UK for example). Finally, the leverage effect of the CCS increases when they are combined with other mechanisms and instruments used by the local authorities and their partners, by connecting up the logics and tools that stem from the social and solidarity economy and using them for social and economic development.

A limited liberatory power in time

Moreover the limitations of the CCS's use in space, their use are also limited in time. First, some CCS have time-limits to their validity. The money "rusts" or "dissolves", according to a principle devised by the economist Silvio Gesell (1958): its face-value decreases regularly (three–six-months), and can be restored only by adding a complement (affixing a stamp that has to be purchased). Conservation fees can thus be attached to the money in order to encourage circulation and dissuade accumulation. Money becomes perishable "like goods and labour" (Gesell, 1958, p. 215). His monetary theory was encouraged by Keynes in *The General Theory of Employment, Interest, and Money* (book 6, note 23) during the US great Depression. Local currencies based on a system of stamped notes (subject to the cost of demurrage, and depreciating with time) were tried out in the 1930s at Wörgl in Austria, and were applied on various terrains, e.g. in the USA in 1933, with Stamp Scrip, under the influence of the economist Irving Fisher[2] (Gatch, 2012); later, in France during the 1950s, a system of local vouchers was developed; very much later, in Argentina, with some currencies used by barter clubs; and, as of the new millennium, in Germany, with regional currencies (such as the Chiemgauer); and last but not least the Stroud pound, launched in the UK in 2009 (Scott Cato and Suárez, 2012) and in France with local currencies (for example the *Abeille*).

Furthermore, CCS are also seen as transitional, appearing during periods of monetary crisis or liquidity shortage, and disappearing as soon as the monetary situation improves. Though it is during periods of crisis that many CCSs are seen as offering original solutions to economic problems, as e.g. in the case of the Argentine barter clubs, some complementary currencies outlast the crises that bring them into being. There are cases of hysteresis. One of the oldest CCSs, the WIR that came into being in Switzerland in the 1930s during the Great Depression, is still in circulation today, though admittedly it has evolved, adapting to the economic cycle.

Finally, some CCSs have emerged in contests that were not crises of liquidity or of payment (see section 1). Some have come into being for social reasons (as in the case of Japanese complementary currency systems) or for environmental ones. This is the case of the local currencies of the Towns in Transition in the UK, set up with a view to transforming and relocalising sectors such as energy, healthcare, farming, business – in order to make the territory more resilient, better able to cope with climate change and peak oil.

A difficulty to recognize this specific monetary plurality regime

Configurations of monetary plurality regimes are many and various today, corresponding to the diversity of units of account and instruments of payment and trade in space defined space in terms of markets and territories. The particular case that interests us here is characterised by coexistence of an official currency and local currencies that are compartmentalised in commercial spaces distinct from one another but nonetheless inter-related. So far, economic literature has not evinced much interest in coexistence and plurality. It apparently has difficulty in accounting for situations of this sort. Having briefly revisited monetary approaches that make it possible to apprehend monetary plurality regimes, we will now turn to this question.

Monetary plurality regimes as understood by contemporary monetary theories

A synthesis has examined the way in which the main economic theories account for – or fail to account for – the question of monetary plurality regime (Blanc et al., 2013). Three series of approaches have been identified. The first one makes no allowance whatever for monetary plurality. Only State money is perceived as real money, and only the official authorities can issue it. No unofficial means of payment circulating in a territory governed by State authorities can be recognised as money (Bell, 2001; Lerner, 1947; Wray, 1999). This is the case in particular with the Chartalist school, following the work of Knapp (1924). Monetarism also reserves to the State the right to issue money. If the neutrality of money is to be guaranteed and inflation controlled, money – or rather, the money supply – cannot be allowed to come from a private source. Monetary plurality constitutes a violation of sovereign rights and alternative currencies are simply forgeries.

A second serie of theories recognise a plurality of issuers and of instruments of trade. The space provided is nonetheless conditional: the unit of account must be unique. On the question of the unit of account, however, there are two very different approaches, not only to monetary organisation, but to economics in general. Post-Keynesianismn, post-Marxism and French Regulation School (Aglietta and Orléan, 1998, 2002; Théret, 2007) see monetary plurality as a characteristic of the monetary economy of production. They reject the hypothesis of an exclusive right of the State to issue currency, and recognise a plurality of private issuers (e.g. banks, and even enterprises), who put into circulation a diversity of means of payment (i.e. private debts). Nonetheless, to enjoy the status of money, these private debts must conform to the monetary rule, i.e. prove their capacity for conversion into the official currency. Approaches of this type are based on a conception of monetary and banking systems as hierarchies over which preside the official currency (the unique unit of account) and the official monetary system. Monetary plurality is seen as an expression of the plurality of instruments of trade, with levels of acceptance (liquidity) that vary (a factor in crises), and/or varying yields. If these alternative currencies are not convertible, the plurality is seen as pathology of the monetary system. Another approach, in particular some cash-in-advance models (particularly Sturzenegger, 1992) and search models (Kiyotaki and Wright, 1993; Kocherlakota and Krueger, 1999), sees monetary plurality as the result of optimal selection by rational economic agents. The framework is a decentralised economy regulated by competition between markets, with money being treated as an instrument of exchanges. Simultaneous circulation of different instruments of trade (e.g. fiat money, national currency, foreign currency, interest-bearing cheque accounts, commodity money, credit cards, and so forth) is seen as problematic, as the currencies are not perfectly interchangeable and have different yields and degrees of acceptability.

The last serie of approaches takes a normative view, advocating monetary plurality. They assume a decentralised market with perfect competition. Examples are Mengerian theories of money (Free Banking; the competitive fiat money model) and monetary theories that integrate financial economics [New Monetary Economics initiated by Black (1970) and Fama (1980)]. Monetary functions are no longer exercised by a single currency; the unit of account is issued either by the central bank (in Free Banking and the competitive fiat money model) or by the market (NME) and is not connected to the plurality of competing bank currencies that serve as instruments of business, and the value of which is determined by the market (the financial market in the case of NME). Competitive fiat money models (Hayek, 1978, 1979; Klein, 1974) go even further, supposing in addition a plurality of units of account: banks have their own trademarks and issue their own scrip as a means of payment. Monetary plurality is analysed as an optimal arrangement nonetheless subjected to the existence of a unique or common unit of account that regulates the system. NME and the competitive fiat money models envisage regulation by the market only, and reject all rules of convertibility applicable to private moneys on conversion into the central currency. A central currency is nonetheless recognised, to guarantee the stability of the system, in the case of competitive flat money. NME sets up competition between private banking currencies treated as (interest-bearing) financial assets, and inter-bank settlements are channelled through clearing houses. Free Banking (Selgin and White, 1994), does not reject centralisation of inter-bank compensation operations and the need to convert one by one private bank currencies into a central public currency (the single unit of account).

CCS invalidate the hypotheses of monetary theories

Monetary plurality approaches mark out the limits of possibility as far as the nature of the issuer of money is concerned, at the same time as the legal status of currency, the relationship between different currencies in a single space, and regulation of the monetary system. We shall now explain why CCS can only be problematic in all the hypothetical, theoretical and normative thinking in the above approaches.

As to the nature of the issuer, first of all these theories recognise only two types: the State and banks (and sometimes, though rarely, enterprises). CCS, however, are issued by none of these, but by agents who belong to civil society. Monetary economists presumably greet monetary initiatives of this sort with a sceptical smile; they see money as a mere tool, supposedly technical; its creation and management are matters for technical experts and legitimate official institutions. Creation of money by agents of civil society is a breach of the traditional practice of monetary sovereignty and of the legal status of national currencies that are always held in law to be sovereign and exclusive. National and supra-national monetary systems today would seem always to be characterised by a unitary conception of money and a hierarchical organisation headed by a central monetary authority in charge of issuing money (ensuring the convertibility of private currencies into the central currency) and ensuring the stability of the system. Historically, however, the conception of money as homogeneous and unique has sometimes been challenged; the reality of this conception has not always been certain; but considerations of this sort have always remained largely marginal; reminders by the central sovereignty have apparently sufficed to discourage any dissidence. This is why CCS invite all stakeholders in the economy to question their own roles and positions, and to reflect on a possible vocation for complementary monetary arrangements. What impact would the latter have on the issues raised by the organisation of today's societies (democratisation, new sources of wealth, new values, commons, preservation of resources, transition/transformation of behaviour patterns and levels of awareness, etc.)? From a political economy perspective of money, and from various cases studies (Argentine barter clubs, SEL in France, LETS in UK, Green Money in Hungary, Green dollars in New Zealand, etc), studies on CCS show how they play a part in re-territorialising the political by creating new spaces for contestation and liberation of monetary order (Laacher, 2003; North, 2007; Ould Ahmed, 2009). Complementary currency systems can be apprehended as social organisations with political aims, their objective being to construct, by means of collective action, new economic and social bonds that respect new values rather than capitalist norms. In these systems, the bonds formed between participants are not merely social but also *politicised*, as Smaïn Laacher (2003) has rightly pointed out. In most cases they establish these bonds outside conventional political structures, representatives and spaces (Ould Ahmed, 2014). However, it is above all the leaders and organisers of these CCS who experience the political activism as such; the rank-and-file users' expectations are more practical, materially and symbolically.

A second characteristic of money is its status. Monetary theories are based on an idea of the status of money that is part of law. Only State money and the official means of payment are recognised as proper money. Recognition of the monetary nature of private bank currencies is conditioned (according to the approach concerned) by convertibility into other currencies and/or into the State currency. Money is recognised as such by its *legality* and *convertibility*. CCS, however, exist in a legal vacuum, often a "grey zone" in legislation; they do not enjoy legal recognition of their status as money and as legal tender. Absence of legal recognition has not precluded, in some cases, recognition of social utility (e.g. the case of community development banks in Brazil, which are recognised as instruments that can be used in the struggle against poverty and exclusion). Their legal framework is currently being worked out or is being discussed[3]. For the time being, however, there is no regulatory framework into which they fit or that recognises their specificity (Blanc and Fare, 2013a).

Most of these currencies have not been recognised by official monetary institutions, whether private or public. They are not officially convertible into either private (i.e. bank) or public (State) currencies. Not being recognised as part of the official monetary system, most of these arrangements are not subject to supervision and regulation by the central bank of their respective countries. Lacking convertibility into other currencies of any sort (community, bank, national, foreign exchange), their existence is usually tenuous. Their purchasing power as we have seen is restricted to the community space in which they circulate. An exception should nonetheless be pointed out: local currencies that on the one hand are convertible into private bank currencies and, on the other hand, are apparently in some cases subject to supervision by the central authorities. This capacity for conversion, however, does not flow from a legal obligation but from organisational options taken at the time of their inception.

The third characteristic of approaches to monetary plurality is their understanding money in terms of its substitutability, or as part of a decentralised but hierarchical monetary system. Substitutability of currencies stems from the postulate of the fungibility of money, money being seen as a universal means of payment, no unit bearing any sign that could distinguish it from another of the same value. The use of one currency rather than another is therefore simply the result of optimal monetary arbitrages by agents in terms of yield or of the transactional costs entailed in the use of alternative currencies. However, highlighting qualitative criteria for conversion and differentiation inherent in CCS invalidates this thesis of pure fungibility (Blanc, 2008). This leads us to privilege a theoretical approach that allows for complementarities in monetary matters, and even for monetary subsidiarity (Fare, 2011, 2014), instead of competition. The monetary subsidiarity amounts, finally, to determine for each currency (taking account of the relevant objectives) a single and singular scale for deployment in the framework of a new territorial governance.

Conclusion

From a deduction of the hypothesis, methodology and normative conceptions of economy and money, the complementary currency systems are interpreted – logically – either as non-monetary phenomena (as they do not constitute legal tender), or as merely insignificant and marginal (their purchasing power being too limited); or – yet another possibility – as a pathology linked to a lack of official currency in quantity or quality, an ill that can be cured by reform of monetary, fiscal or redistribution policy. No matter which interpretation is adopted, CCS are not deemed to be a fitting subject for economic literature.

An economic approach, using socio-economic and anthropological methods seems more helpful to reveal the multidimensional nature, the logics and the impact of these particular monetary practices. An approach of this sort takes account in particular of the social and political contexts in which an economy operates. The literature on CCS, that is still emerging, uses this kind of methodology. They also share a rejection of the instrumental conception of money that reduces it to a mere tool of commercial trade; they privileges a socio-economic and institutional approach to money, its uses and the practices associated with it (Aglietta and Orléan, 1998, 2002; Blanc, 2000, 2009; Ingham, 2006; Ould Ahmed, 2008; Théret, 2007; Zelizer, 1994). They see money as a basic social institution of all societies, whether commercial or not: the institution that enables people to settle debts thanks to the practices of accounting and payment. An approach of this sort takes account in particular of the social and political contexts in which an economy operates, and rejects attempts to make the economy a natural, autonomous entity (Polanyi, 2008; Steiner andVatin, 2009).

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Table 1. Main characteristics of some currencies

<table>
<tr><th rowspan="2">CCS</th><th rowspan="2">Countries</th><th rowspan="2">Monetary Forms</th><th rowspan="2">Convertibility</th><th colspan="4">Actors involved</th></tr>
<tr><th>Relationship with banks</th><th>Relationship with local shops and producers</th><th>Relationship with third sector or the social and solidarity economy</th><th>Relationship with local public policies</th></tr>
<tr><td>LETS</td><td>UK
France
Japan
South of Africa
USA
Germany
Belgium
Austria
Hungary
Australia
New Zealand</td><td>Scriptural</td><td>Non-convertible</td><td>Autonomous</td><td>It depends on the case : sometimes connected</td><td>More or less connected by countries</td><td>Seldom</td></tr>
<tr><td>Currencies in Barter Clubs</td><td>Argentina</td><td>Manual</td><td>Non-convertible</td><td>Autonomous</td><td>May be integrated; can promote</td><td>Connected</td><td>Sometimes connected</td></tr>
<tr><td>Time banks</td><td>UK
Italie
USA
Japan</td><td>Scriptural</td><td>Non-convertible</td><td>Autonomous</td><td>Autonomous</td><td>Often connected</td><td>Connected</td></tr>
</table>

	Spain Greece Finland						
Accorderie	Canada France	Scriptural	Non-convertible	Autonomous	Autonomous	Connected	Connected (France)
Local complementary currency	France USA Canada	Manual	Convertible (on entry but on exit for service providers only)	Sometimes connected	At the heart of the scheme : seeks to promote	Connected	Sometimes connected
Regiogeld	Germany	Manual and electronic	Convertible (on entry but on exit for service providers only)	Sometimes connected	At the heart of the scheme : seeks to promote	Connected	Seldom
Brazilian community currencies	Brazil	Manual	Convertible (on entry but on exit for service providers only)	Connected	At the heart of the scheme : seeks to promote	Connected	Connected
Currencies of Towns in Transition	UK	Manual and electronic	Convertible (on entry but on exit for service providers only)	Connected	At the heart of the scheme : seeks to promote	Connected	Connected

Experimental SOL	France	Electronic	Convertible (cooperation SOL on entry but on exit for service providers only), non convertible (commitment SOL and assigned SOL)	Sometimes connected	Connected	At the heart of the scheme	Connected
Nu	Netherlands	Scriptural	Convertible (on entry but on exit for service providers only)	Autonomous	Connected	Connected	Connected

Source: Adapted from Fare (2011).

Table 2. Some examples of CCS

Name of currency	Zone of activity	Date of introduction of the currency	Number of providers	Number of individual users
Palmas	Conjunto Palmeira (Fortaleza, Brazil)	2002	270 (in 2013)	Not recorded
Chiemgauer	Chiemgau (Germany)	2003	630 (end 2012)	2573 (end 2012)
Brixton pound	Brixton (London, UK)	September 2009	200 (paper money) ; 100 (payment by SMS) (October. 2013)	3000 used it at least once (by 2012)

Bristol pound	Bristol (UK)	September 2012	600 (September 2013)	A few thousand, 1 200 of whom held accounts with the Bristol Credit Union (Sept. 2013)
Béki	Canton of Redange (Luxemburg)	2012	71 (January 2014)	Not recorded
UDIS	Suchitoto (San Salvador)	2009	100	Not recorded
Eusko	Basque country (France)	January 2013	500 (December 2013)	2 700 (December 2013)
NU Spaarpass incentive card	Netherlands	May 2002 - March 2003	Approx one hundred	10 000
SOL Alpine	France	November 2007	23 (2012)	147 active users (2011) out of 1360 holders of cards distributed since 2007

Source: The Authors, using documents distributed by associations supporting CCS and interviews carried out ad hoc.

Notes

[1] The website http://www.complementarycurrency.org/ccDatabase/ managed by Stephen DeMeulenaere, founder and coordinator of the Complementary Currency Resource Centre (CCRC), details this diversity.

[2] During the US Great depression in the 1930s, Fisher proposed to set up this kind of monetary rule to Roosevelt (but he didn't convince him).

[3] In France, we refer readers to the CCS/SOL network and ACPR (the French supervisory authority on banking and insurance) for information on the legal and monetary framework applicable to CCS.
In an article published in the APCR review (*Revue de l'APCR*) in 2013, the authority officialised its position on CCS, indicating the legal framework it intended applying to them http://www.acpr.banque-france.fr/fileadmin/user_upload/acp/publications/revue-acp/201309-Revue-autorite-controle-prudentiel-resolution.pdf Discussions of the same sort are, more or less advanced, in progress elsewhere, in particular in Belgium and the UK. For the latter see Naqvi and Southgate (2013).