

<http://digithum.uoc.edu>**Special section: “Money in the 21st Century: Digital Exchange, Extra-State Currencies, and the Relational Character of Money”****The Potential for Community and Complementary Currencies (CCs) to Enhance Human Aspects of Economic Exchange****Dr. Dimitrios Reppas**

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**Abstract**

This article explores the potential for Community and Complementary Currency (CC) use to enhance human aspects of economic exchange. As far back as Aristotle, social thinkers have expressed concern that the pursuit of profit for its own sake leads to the dehumanization of those participating in economic relations, a concern which was echoed in the work of foundational thinkers in the modern Social Sciences, for example Karl Marx and Max Weber. This article probes the scope of CC use to alleviate such dehumanization, situated within this broader social context of contemporary global Capitalism. Beginning with a review of the types of CCs, this paper considers the objectives and goals of CCs worldwide. Indeed, there is room for optimism that CCs may ease negative aspects of traditional financial exchange by serving those on the fringes of and/or excluded from formal economies, and without necessarily competing with public or private traditional banking institutions. The paper concludes with reflections on the key aspects of CCs aiding their successful implementation and sustainable use. Although this paper is conceptual in nature, it offers a meta-analysis from many case studies of CCs, and suggests that CCs can be an effective tool for lessening some of the harmful impacts of the dominant economic relations found in today’s globalized world.

**Keywords**

complementary currency, social inclusion, economic inclusion, financial transactions, mobile money, mobile currency, digital currency

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## El potencial de las monedas sociales y complementarias (MSC) para mejorar los aspectos humanos del intercambio económico

### Resumen

Este artículo quiere explorar el potencial de las monedas sociales y complementarias (en adelante, MSC) para mejorar los aspectos humanos del intercambio económico. Ya en tiempos de Aristóteles, a los pensadores sociales expresaban les preocupaba que la búsqueda de beneficios condujera a la deshumanización de quienes participan en los intercambios económicos, una tema que también trataron los pensadores fundacionales de las ciencias sociales modernas, como Karl Marx y Max Weber. Este artículo prueba el potencial del uso de MSC para reducir esta deshumanización, que ahora se sitúa en un contexto social más amplio, el del capitalismo global contemporáneo. Comenzando con una revisión de los tipos de MSC, el artículo toma en consideración los objetivos y metas de las MSC en todo el mundo. Hay motivos para ser optimistas y pensar que las MSC pueden reducir los aspectos negativos del intercambio financiero tradicional al utilizarse en otros de carácter periférico y/o excluidos de los sistemas económicos formales, sin necesariamente competir con las instituciones bancarias tradicionales públicas o privadas. Este trabajo concluye con una reflexión sobre los aspectos clave de las MSC que contribuyen al éxito de su implementación y a garantizar un uso sostenible. A pesar de su carácter conceptual, el artículo ofrece un metaanálisis de muchos estudios de campo en MSC y, en última instancia, sugiere que las MSC pueden ser una herramienta eficaz para mitigar algunas de las cualidades perjudiciales de las relaciones económicas dominantes en un mundo globalizado.

### Palabras clave

moneda complementaria, inclusión social, inclusión económica, transacciones financieras, dinero móvil, moneda móvil, moneda digital

## Section 1: Introduction

The accumulation of money as an end in itself, and the dehumanizing effects of such practices have concerned social thinkers since the time of Aristotle. Such concerns have also played a crucial role in shaping the development of modern social scientists. Many of the foundational thinkers in the Sociology field (notably, Karl Marx and Max Weber) considered the role of economic relations in the broader field of human society. Unlike the conceptualization of human behavior used in modern economic analysis, Aristotle did not take a unidimensional view of human economic agents as the rational and instrumentally-behaving *homo oeconomicus*. Instead, he sought to understand the social processes regulating market situations where currency was used as a medium for exchange (Borisonik, 2014).

There can be no doubt that the dominant currency-dependent system of exchange partly contributes to high levels of global economic inequality, which have now reached obscene levels (e.g., see Hardoon, 2017). A key symptom of the inefficiency of currency-based exchange is the failure of the global economic system to properly meet Humanity's need in a sustainable fashion. Clearly, there will also be negative outcomes arising from production, consumption, and transportation systems and structures; however, as far back as Aristotle's conception of value (e.g., see Borisonik, 2016), social theorists have been concerned about the ways in

which the exchange aspects of economic activities play a role in the dehumanization of the very people whose needs the systems were designed to serve.

This study conceptually explores the potential of "Complementary Currencies" or "Community Currencies" (hereafter CCs) for remedying some of the negative effects of the mainstream, State-sponsored currencies dominating today's global system of economic exchange. This paper probes the scope CCs offer for alleviating such dehumanization, situated within this broader social context of contemporary global Capitalism. This scope arises from a characteristic feature of CCs, namely that they involve zero or negative interest. In other words, CCs both abhor interest as harmful and spurn the traditional function of money as a store of value. Beginning with a review of the types of CCs, the paper considers the objectives and goals of CCs worldwide. Indeed, there are reasons for thinking that CCs may ease negative aspects of traditional financial exchange by serving those on the fringes of and/or excluded from formal economies, and without necessarily competing with public or private traditional banking institutions. The paper concludes with reflections on the key aspects of CCs aiding their successful implementation and sustainable use. Although this paper is conceptual in nature, it offers a meta-analysis from many case studies of CCs, and suggests that CCs can be an effective tool for lessening some of the harmful impacts of the dominant economic relations found in today's globalized world.

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## Section 2: Literature

### Section 2.1: Key Social Thinkers and the Social Role of Money

The Aristotelian concept of *oikonomia* took in broader social relations, while the modern concept of economy is generally limited to the pursuit of financial profit and capital accumulation. Aristotle advocated the use of currency as a tool for exchange rather than for accumulating money for its own sake (Borisonik, 2014). This concern was echoed, albeit in varying ways, by 'The Founding Fathers' of Sociology such as Karl Marx (2010 [1867]) and Max Weber (1992 [1904/5]) who, though taking divergent philosophical positions, reached similar conclusions regarding Capitalism's negative consequences for individuals (alienation and the iron cage of rationality, respectively).

Aristotle described two incompatible notions of wealth (Murray, 2010). First, the concept of *oikonomia* concerned the management of the material and processes needed to maintain a household, municipality, or State. Second, the practice of *chrematistics* concerns the acquisition of wealth and materials to be used in household management. While Aristotle viewed the proportionate accumulation of material and wealth to be a necessity of social life (so-called "necessary chrematistics"), he was philosophically opposed to the accumulation of money for its own sake. As currency was intended as a tool for ease of exchange, he viewed the exchange of goods for money as necessary only insofar as such monies would be used to satisfy material needs (i.e., in order to purchase additional goods). However, Aristotle was critical of traders who purchased goods with money when their goal was not the use of the goods but rather to re-sell them for gain. He described such "illicit chrematistics" an unnatural activity that dehumanized those who traded with the goal of accumulating more money. In his view, such trading did not contribute to the production of useful goods; and thus, did not add economic value (see Aristotle, 2017, I. 1257a-1258a).

Although chrematistics' roots lay in antiquity, it persisted in Europe throughout the Middle Ages (and beyond) through the dominance of the Catholic worldview, and thus unnatural chrematistics were forbidden along with the practice of usury. Modern Social Science emerged in 19th-Century Europe as the continent underwent rapid industrialization, urbanization, and population growth. One of its fundamental concerns was the individual's position within the larger socio-economic context. Karl Marx wrote Volume I of *Das Kapital* (2010 [1867]) as a clarification and critique of Political Economy, and one of the main foci was the alienation experienced by the working class as they sold their labor in the Capitalist system. The crux of the problem involved the exploitation of workers by the Capitalist class in its

pursuit of profit, a process which contributed to the indiscriminate alienation (both personal and social) of workers, who were forced to sell their labor to make ends meet. In other words, workers receive only a fraction of the value they contribute through their work and are impoverished as a result. Meanwhile, the Capitalist class pockets the difference and makes huge profits. As Marx described it, Capitalism was predicated on the accumulation of capital in the hands of the few, which he described as an unnatural form of social and economic relations.

In 1904 and 1905, Max Weber (1992) wrote *The Protestant Ethic and the Spirit of Capitalism*, another foundational volume in the field of Sociology, providing a theory of the development of the Capitalist system in mainly Protestant nations, notably Holland and America. Although Weber views the dehumanizing aspects of social relations in Capitalist society differently from Marx, the source of human estrangement under Capitalism stems from the same source, namely unnatural chrematistics. Weber posited that Capitalism was driven by a near-exclusive focus on the rational pursuit of efficiency, and that it was this efficiency-focus that made individuals feel their social and economic relations were meaningless. While Weber examined certain early Protestant sects (e.g., Calvinists) as pursuing productivity and capital accumulation for spiritually meaningful reasons, the dominance of the Capitalist system in the late 19th and early 20th centuries meant that everyone was forced to engage in rational, efficiency-oriented activities simply to survive in modern society.

Though for different reasons than those posited by Marx, Weber nonetheless reached the same conclusion, namely that modern Capitalism was unnatural and harmful to those forced to live and work under it. Indeed, for both Marx and Weber, their observations led them to conclusions dovetailing with Aristotle's criticism that unnatural chrematistics dehumanized both society and individual. Given the dominance of financial and economic relations in early 21st-Century society at micro and macro levels of social organization, might it be that economic relations are becoming ever more dehumanizing? The global penetration of Capitalist relations based on the pursuit of profit continues apace, resulting in the production and consumption of goods that vastly exceed what is needed to sustain individual, community, and social life.

### Section 2.2: Exploring Complementary and Community Currencies (CCs)

This sub-section explores CCs' potential to mitigate some aspects of the dehumanization observed in economic exchange systems, which are dominated by State-sponsored currencies. In general, CCs allow communities to trade resources and skills among their members, as they typically circulate only within the boundaries of a given geographic community, and the rationale for using them

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is often to contribute to the economic, social, and environmental sustainability of that community.

The earliest examples of CCs date back to the 19th century (i.e., to the 1832 Labor Exchange of England) but several other forms of exchange (offering communities the chance to develop some form of self-reliance) were developed in the 1930s in various corners of the world (e.g., in Germany, Austria, France, USA). This period was characterized by rising Capitalism and macroeconomic depression, which eventually led some activists to explore other ways to revitalize the economy<sup>1</sup>. Following the 1983 Local Exchange Trading System of Vancouver (aimed at tackling unemployment due to the closure of local industry), a new wave of contemporary CCs emerged in both developing and developed countries. The main difference between the earlier systems (that is to say, those in the 1930s) and the contemporary ones (from the 1980s onwards) is that the former arose from dire macroeconomic need, while the latter were developed more as solutions for fostering human development, social cohesion and protection (Blanc, 2006). In other words, the main strength of contemporary CCs is their ability to spark social innovation (Blanc, 2012). Regarding the geographical distribution of contemporary CCs, Seyfang and Longhurst (2013) note that the language link among several countries has allowed CCs to spread over several continents (e.g., from North America to the UK, Australia, and New Zealand).

While it is hard to provide an accurate list of all such systems, it seems that some 3,500 to 4,500 CCs have been recorded (since the 1980s) in around 50 countries (Fare & Ahmed, 2017). Most of these contemporary CCs have been organized either by groups of individuals/practitioners, or by NGOs (such as grassroots initiatives), and in some cases, by local governmental authorities<sup>2</sup>. CCs are sometimes termed in the literature as “parallel currencies”, “local currencies”, “regional currencies”, “alternative currencies”, “social currencies”, or “supplementary currencies”. In other

words, the terminology is still green and there is no clear-cut, generally-accepted definition of CCs (Schroeder et al., 2011). Nevertheless, the terminological debate falls outside the scope of this paper. For the sake of simplicity, we shall refer to all such schemes as CCs.<sup>3</sup>

Contemporary CCs are not homogeneous because they have not replicated any specific model, but instead have simply spread and diversified (Blanc & Fare, 2013). For instance, some systems use (as a form of currency) a smart card or electronic format, while others use paper money or other manual forms. Furthermore, some CCs are linked to an official national currency and banks (in that they are convertible to a State-sanctioned currency), while others are non-convertible (being autonomous). Despite their heterogeneity, CCs do share two distinctive characteristics (Blanc, 2011): they are non-national (i.e., designed and implemented by civil society, rather than by governments); and they are not-for-profit forms of currencies. In the literature, there have been various attempts to classify and categorize contemporary CCs; for instance, Fare & Ahmed(2017)<sup>4</sup> suggest the following four generations of CCs (having emerged, since the 1980s):

LETS Models (or “Mutual Exchange” systems);  
Time Currencies (“Time Banks”);  
Local Currencies;  
Complex Schemes (or “Mobile Money”)

Most CCs found worldwide fall within the first two categories (Seyfang & Longhurst, 2013), as an estimated 90% of CCs worldwide have been either Mutual Exchange schemes or Time Banks. By contrast, local currencies account for about 7% of CCs). The above classification system does not suggest that one category puts an end to other generations of models, and indeed, there is some overlap among CC types due to their complexity. Instead, any classification or typology of CCs should be flexible enough to let innovations develop and ensure the possibility of

1. See, for instance, Blanc (2006) who discusses how the ideas of the Welshman Robert Owen (1771-1858) and the German Silvio Gesell (1862-1930) were to lay the foundations for several later experiments with local currencies in the 1930s in both Europe and the US.
2. Bitcoin, a virtual currency introduced in 2009 by a group under the alias “Satoshi Nakamoto”, must be distinguished from these grassroots-generated local currencies because Bitcoin is not a regional but a global currency (i.e., anyone can participate; it is just a matter of going on-line and running the Bitcoin software). Therefore, the issuing of Bitcoins is not controlled by a regional issuer (or a governmental authority, or a central bank) but by Bitcoin users, known as “miners”. Bitcoin is not under direct control of any individual or organization and therefore operates outside national laws. Bitcoin miners (typically Ph.D. holders) are solving ever harder algorithms to extract packages of Bitcoins. The user who solves this otherwise meaningless mathematical puzzle first, creates a new “block”, which is added to a “block chain”. The winner broadcasts his “proof of work” (the solution can then be verified by other miners) and is finally rewarded with Bitcoins, typically 25 Bitcoins for every winning block. The identities of all miners are shielded by pseudonyms, although all transactions, except the names of users, are broadcast to every computer on the network. This is why Bitcoin is called a “cryptocurrency”, as users are allowed to keep their identities secret. Critics of Bitcoin argue that it facilitates crime, including contraband (drugs, weapons, human trafficking) and tax evasion.
3. The growing interest in CCs over the last 4 decades has resulted in the foundation of the *International Journal of Community Currency Research* (<https://ijccr.net/>) (since 1997). More recently (in 2015), the *Research Association on Monetary Innovation and Community and Complementary Currency Systems* (RAMICS: <https://ramics.org/>) was established. RAMICS will hold its next international conference in September 2019 in Japan (while several international conferences on CCs having already been held in France (2011), the Netherlands (2013), Brazil (2015), and Spain (2017).
4. Blanc (2011), Michel and Hudon (2015), as well as Seyfang and Longhurst (2013) also provide good discussions on the various kinds of CCs that have sprung up over time, covering their diverse natures and goals. Martignoni (2012) also provides a typology of the various CCs that have emerged in German-speaking Europe.

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a dynamic view of CCs (Blanc, 2011). The next few paragraphs briefly describe some basic features of the first three categories, after which we shall shift our attention to Complex Schemes/Mobile Money forms of CCs, i.e., to the fourth and most recent generation.

Local Exchange Trading Systems (LETS) were the first generation, and they emerged in Canada and England as a result of economic recession. In the 1990s, they spread quickly to Argentina, South Africa, Australia, France, and other parts of Europe (Switzerland, Austria, and the Netherlands). In general, LETS use “deposit money”. That is, the buyer pays the seller (for goods/services provided) using a cheque-like trading slip which records the amount of goods/services as a “credit” to the seller, and as a “debit” to the buyer. These balances (of credits and debits) are then handed over to some central administrator to enter them in a computerized system. Early systems used paper formats, and more recent ones use electronic formats. A common characteristic of LETS is that the units are not convertible to the official currency of the country. Two well-known examples of LETS are the Local Exchange System (SEL) in France (since 1994); and the Community Exchange System (CES) in Cape Town, South Africa (since 2003).

In Time Currencies (or Time Banks), participants exchange services in terms of their time. A basic feature of such CCs is that they are not backed by the national currency and are thus wholly non-convertible to the latter. A successful example of a time currency is “Ithaca Hours”, introduced in 1991, in Ithaca, New York (USA). Ithaca notes are accepted and circulated in certain stores in the region and are given in exchange for labor (for instance, \$10 buys one “Ithaca Hour”, which can then be used as a form of payment to hire someone (from a network of about 500 participating members) for services provided for one hour). The system seeks to encourage local employment.

Local Currencies use either paper money or an electronic form of payment that is convertible to the national currency (and therefore, Local Currencies are covered by equivalent reserves in the national currency). Local currencies are typically used for ordinary purchases at participating shops and enterprises. They are generally accepted by environmentally-focused stores (e.g., those selling organic foods and health products) and by co-operative grocery stores (Kim et al., 2016). Some well-studied examples of local currencies are the Berk-Shares system in the Berkshire region of Massachusetts (USA), the Regiogeld system (Germany), the Lewes Pound and the Bristol Pound (UK); and the B-Note in Baltimore, Maryland (USA).

Most complex CCs schemes typically use an electronic form of currency, which requires the use of a smart card/tablet/mobile phone (thus, it is also called “Mobile Money”). This CC uses

an application on an electronic device, such as a mobile phone, SIM card or chip in a government-issued ID. The main benefit of mobile currencies is that users can make basic financial transactions (such as transfers, deposits, and withdrawals of digital money) without a formal bank account. This makes mobile money different from mobile banking (in the latter case, mobile users access their existing accounts with mainstream financial institutions). For this reason, mobile money lies outside the formal banking system on which global Capitalism relies.

As of 2019, about 720 million people worldwide have used a mobile money account, and about half of them (350 million) are in Sub-Saharan Africa (GSMA, 2019)<sup>5</sup>. Kenya and Tanzania were among the very first countries worldwide to adopt mobile money in the mid-2000s. Kenya’s “M-Pesa” system is the most successful and well-documented and studied example of mobile money. By the end of 2015, mobile money services had been offered in 93 countries (Suri, 2017). Africa has by far and away the highest adoption rate for mobile money in the world (Lashitew et al., 2019). At first sight, Africa’s massive, pioneering adoption of mobile money is surprising given that new technologies usually spring up in advanced countries and only spread to the developing nations later on. The Discussion Section below (Section 4) offers an explanation for Africa’s quick take-up of the innovation.

The first mobile money systems focused strongly on consumer transactions (i.e., on allowing person-to-person payments). Generally, consumers would deposit cash (legal tender) in their mobile money accounts by visiting a participating agent. Participating agents are typically small retailers, such as grocery stores and petrol stations, and these agents are the equivalent of ATMs for the electronic currency. When depositing official money, consumers purchase an equivalent value in the electronic currency (E-money) which is held in their mobile wallets. E-money can then be used for transactions with other individuals holding a mobile money account. Several mobile systems (such as Kenya’s M-Pesa system) have evolved, allowing consumers to also make digital payments to businesses, pay utility bills, receive payments from businesses (including wages), and to maintain a balance (save) digital money.

Overall, it appears as if mobile money accounts function very similarly to formal bank accounts. However, mobile money accounts are different in several respects. First, registering for E-money accounts take just a few minutes (in many countries opening a formal bank account takes several days). Second, mobile money account holders hardly ever have to visit a formal bank branch for any of the transactions of the digital currency, although they do need to visit a participating Agent for the initial deposit of cash into their mobile account. Third, no interest is paid on E-money deposits, unlike in many formal banking systems, and loans are very seldom made to users. Fourth, there is a ceiling

5. Data provided by the GSMA network of 750 mobile operators worldwide.

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on E-money transactions (e.g., a maximum of \$1,000 in Kenya and Uganda) to minimize the use of mobile money for money laundering. Finally, mobile money is often held in trust-accounts (within the commercial formal banking system) and thus different countries introduce varying regulatory frameworks for the trust-account holders. Nevertheless, these regulations are, in general, less stringent than the regulations imposed on formal banking systems (Suri, 2017).

### Section 3: The Objectives and Goals of Complementary Currencies Worldwide

As discussed in the previous section, several CCs sprang up during periods of economic instability, or even war (for the pre-1980s CCs). For instance, in the US, several CCs started during the Great Depression, though they were eventually halted by President F. D. Roosevelt, over concerns of losing control over the monetary system (Seyfang, 2000). However, in general, CCs have been viewed as underpinning local communities and making them more self-reliant, and in particular of “insulating” local economies from larger exogenous shocks. The development of several contemporary CCs since the 1980s has indeed been linked to periods of monetary crisis or financial shock, particularly in the Southern hemisphere. (See, for instance, Argentina’s barter clubs).<sup>6</sup> In the Northern hemisphere, contemporary CCs have proved rather more durable than earlier systems emerging in response to crises (with the latter soon vanishing once the local economy began to recover). Furthermore, in the Northern hemisphere, participants’ motivations seem to be not only economic but also ecological and ideological. Thus, the widespread use of CCs today may be explained in part by the fact that many post-materialist societies recognize the potential of CCs to boost social integration and achieve social sustainability. Thus, CCs are now seen as an effective tool for building social capital and strengthening social cohesion, rather than as a tool for protecting local communities from exogenous financial shocks or crises.

Each of the 4 types of CCs (as outlined in Section 2.2) has a different goal/objective. Michel and Hudon (2015) classify the objectives of CCs into three broad themes/categories (and much of the literature discusses CCs’ goals in connection with these three dimensions):

Economic sustainability,  
Social sustainability, and  
Environmental sustainability.

Although evidence suggests that few CCs have actually helped to achieve environmental sustainability (Michel & Hudon, 2015; Seyfang & Longhurst, 2013); there is some evidence that it is effective in building economic sustainability, as some CCs improve employability and promote local economic activity (Michel & Hudon, 2015). Similarly, most CCs seem to have a positive impact in terms of social sustainability and in the achievement of social goals (Michel & Hudon, 2015; Seyfang & Longhurst, 2013). Fare and Ahmed (2017) also find that CCs provide some support for local economies and make a limited contribution to environmental sustainability (for example, promotion of sustainable consumption, or smaller carbon footprints). Most CCs (notably in Brazil, Argentina, and Japan) have been successful in combating social exclusion by fostering solidarity and mutual aid among individuals, and promoting “social uses” of money.

Although there is no generally-agreed definition of Social Capital, the term is best used to describe social networks and different social behaviors (e.g., trust, equity, cooperation, reciprocity), and generally refers to the intangible collective efficacy experienced in settings where social bonds are strong (see Sanz, 2016, but also Durkheim, 1951 [1897]; 1997 [1893]). Unlike financial forms of capital, social capital cannot be stored/accumulated in an account (whether in a traditional bank or an E-bank) but rather is only manifested through social relations. CCs promote social participation, allowing fringe groups, (for instance, the poor and the elderly) to participate in economic relations from which they might otherwise be excluded, and therefore create/maintain bonds of reciprocity between people within a community. Moreover, CCs boost participants’ self-esteem and personal efficacy, as the members of hitherto excluded segments of society begin to take part in the broader socio-economic sphere. For example, the Argentine economic crisis of the 1990s led to the exclusion of many professionals/skilled workers (particularly middle-class women) from formal labor markets; and it was these groups who took part in barter markets (Pearson, 2003). In Kenya’s case, Suri and Jack (2016) find that access to mobile money has been especially effective in improving women’s economic lives. Women in Kenya seem to have changed their occupation (shifting away from agriculture and into small business and retail), as mobile money boosted their financial inclusion through access to direct remittances, more privacy for their financial dealings, and greater access to credit.

Despite the prospective benefits of CCs, such potential is not without limits. For example, Fare and Ahmed (2017) note that the positive social and economic impacts of CCs tend to be small-scale, i.e., the beneficial impacts of CCs are endogenous/marginal to

6. See Pearson (2003) for the history of barter markets in Argentina (going back to the 1980s) and for an explanation of how they work. Trade occurs in staples (such as fruits and vegetables) but also in necessary goods (such as clothes, cleaning materials, and household utensils), and essential services (such as plumbing, dentistry, and car insurance).

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the local mainstream economies insofar as a rise in consumption generally takes place within local economies, often improving the lives of fringe groups through greater economic inclusion. Overall, they conclude that scale is an issue, particularly for LETS; while Time Currency systems seem to be fairly successful (at least in terms of fostering social inclusion) notwithstanding their small-scale. Similarly, Seyfang (2000) states that the impact of some CCs (for example, in boosting the local economy and benefiting users) is hindered by their small size, or by restrictions on the range of good and services exchanged. Thiel (2011) also concludes that the low economic impact of the Regiogeld system in Germany and the failure to achieve wider geographical acceptance arises from both the small business volume involved and the idealistic nature of the consumers and businesses taking part. In the case of the Bristol Pound (a local currency in the UK), Marshall and O'Neill (2018) find that the system has very little economic impact even within the local economy and that as a result, it has done little to foster either local production and or regional economic development. Therefore, CCs may not be the answer to the dehumanizing reach of globalization. Instead, the authors suggest that other approaches should be pursued to achieve localization (apart from local currencies), such as government controls on capital mobility, tariffs on imports, and subsidies for domestic production. Overall, it seems that scale largely determines the reach of the social and economic benefits from CC use. In the case of the Swiss WIR system, Stodder (2009) finds a positive (stabilizing) relationship between the WIR and the country's economy. Specifically, WIR money is negatively correlated with GDP, and thus makes up for the lack of ordinary currency given that use of the system strongly tracks Swiss unemployment trends.

Even if CCs' small scale stops them from being as effective as one might hope, Fare and Ahmed (2017) point out that any endogenous beneficial effects of CCs on the local economies are important for given individuals, such as those in poor households (who are able to launch micro-enterprises and/or diversify their sources of income) and for small businesses (which may be able to get interest-free loans in the local currency). For instance, participants in the Argentine barter markets were able to supplement their formal incomes to cover their daily needs with goods and services from the barter networks, reserving their formal money to pay taxes and bills (Pearson, 2003). Similarly, the adoption of the M-Pesa mobile money system and of the Bangla-Pesa Collaborative/Mutual Credit System have both allowed impoverished Kenyan communities to "free" a portion of their national currency (i.e., Kenyan Shillings), earmarking this to boosting their standards of living (Ruddick & Mariani, 2013; Ruddick et al., 2015).

Contrary to most studies, which find limited evidence of CCs benefiting the economic lives of the communities in which they are used, Suri and Jack (2016) note the positive long-term economic impact of the adoption of M-Pesa mobile money in

Kenya. They find that increased access to a dense network of agents providing access to mobile money services (compared to the limited network of formal banking institutions, especially in villages) reduced national poverty by about 2%, and specifically that about 200,000 households moved out of extreme poverty. What seems to be driving the positive impact of mobile money on Kenya's economy is the fact that mobile money has slashed the transaction costs arising from remittances (Suri, 2017). Such a reduction in transaction fees facilitates trade given: (1) that some transactions would never have taken place without mobile money, and; (2) the greater efficiency of transactions that would have occurred even under a traditional monetary system.

Suri et al. (2012) quantify the frequency of M-Pesa remittance activity in Kenya, finding that user households were about one-third more likely to receive or send remittances compared to non-user households. In a subsequent study, Suri and Jack (2016) found that the reduced transaction costs (through the use of mobile money) mean M-Pesa users can flatten their financial risks, compared to non-users users. The reason for this improved risk-sharing is that households taking part in the mobile currency system have a larger set of people in their network to rely upon whenever there is an economic shock. Put another way, it is easier for participating households to receive a remittance quickly from friends or family, making them less vulnerable to shocks. With regards to experiencing health shocks (i.e., an illness or other medical emergency), Suri et al. (2012) used a difference-in-difference model, estimating that M-Pesa users have quickly been able to boost their overall expenditures by around 12%, while non-users in similar situations tend to cut their overall consumption, particularly on education. That is, non-users of the mobile money system are more likely to pull their children out of school in order to cover their increased medical spending. By contrast, M-Pesa users are generally able to keep education spending constant despite the financial stress caused by ill health.

## Section 4: Discussion

The main conclusion drawn from the foregoing section is that most CCs have at best resulted in modest economic benefits for their local societies, and that these benefits fall short of the anticipated economic gains. Despite this, the use of CCs may lead to non-monetary benefits, as several studies confirm the positive impacts of CCs in building forms of Social Capital. In this section, the discussion reappraises the sociological critique of contemporary societies, focusing on money, and ultimately explores CCs' scope for achieving social and economic goals.

Sociologists have explored the evolution and purpose of money in society, and taken together Marx and Weber provide alternative (albeit complementary) views on the problematic

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nature of contemporary profit-seeking and capital accumulation fetishism in the Capitalist system. The orthodox view of money (as expressed by conventional economists) defines money as a medium of exchange, and as a store of value (Seyfang, 2000). The alternative body of literature on money and economic relations (what may be called the “social economy” or “human economy”) incorporates social aspects into economic analysis. In doing so, it follows in the footsteps of the Aristotelian tradition of integrating “economic life” and “social life”. This broader view of using money towards achieving social purposes (i.e., the “social use” of money) provides a fairly compelling rationale/justification for continued use of CCs.

By design, many CCs attempt to serve the overall (economic, social, and environmental) wellbeing of the population by recognizing the importance of space and place in monetary transactions. CCs are geographically rooted; and they offer face-to-face interaction that builds social bonds and community spirit. When CCs are used as the medium of exchange, money is no longer viewed as a geographically neutral/homogeneous/universal tool to facilitate exchange. Instead, money is social *embedded* in its context<sup>7</sup>, because social relationships are involved in such alternative monetary transactions.

Notably, CCs can perform only some of the functions of formal currencies: “*they cannot act as a standard of deferred payment (which involves charging interest)*” (Pearson, 2003). Thus, CCs may avoid the dehumanizing aspects of modern economic exchange, namely the “unnatural chrematistics” mentioned by Aristotle (2017; also see Borisonik, 2014). This may be why several contemporary CCs are subject to *demurrage*, whereby the value of the “local scrip” falls over time (e.g., every week or every couple of months). Therefore, the holder has an incentive to use the local currency rather than to store it.<sup>8</sup> In short, the demurrage principle discourages the accumulation of wealth and saving, contrary to the traditional view that money is a tool to store value).<sup>9</sup>

CCs have been successful in attracting disenfranchised economic actors, such as low-income households, women, and the unemployed, CCs have thus been useful in tackling social inequality and social exclusion. The people on society’s fringes (who are often excluded from conventional economic activities) can use CCs to reconnect with their communities and gain self-confidence. At their best, CCs can build social bonds among participants *without* the CC system having to tie in with the official macro-monetary system. There is also evidence that mobile money has welfare benefits for societies. Suri et al. (2012) show that users of mobile money in Kenya have been able to use their remittance

network to meet additional health care costs when they fall ill, and without having to cut spending on food and education.

As discussed in Section 3, scale limitations prevent CCs from being as effective as they might, and Fare and Ahmed (2017) point out that CCs would be better able to achieve their social goals if they could attract more users, and if more goods and service providers were to accept them for payment purposes. For this to happen, CCs would need institutional recognition from public authorities and banks, which could either come in the form of financial support, or as official validation by governmental authorities. For the empowerment of individuals, communities, and societies, the main factors for the successful roll-out and future deployment of mobile money systems seem to be as follows:

First, in Kenya’s case, one needs to take the scarcity of the national currency into account. This led to impoverished communities developing M-Pesa mobile money and the Bangla-Pesa collaborative credit system. Through Bangla-Pesa, the excess supply of goods and services is finally absorbed, ensuring excess perishable business stock is traded, preventing the waste that would have arisen had there been no CCs (Ruddick et al., 2015; Ruddick & Mariani, 2013). Whenever local communities experience a shortage in their national currency, because centralized banks and firms do not focus on the periphery (which is viewed as less profitable), then CCs can step in to deal with the problem (Seyfang, 2000). CCs are geographically bounded (that is, they are location-specific), and not only do they allow transactions to take place that might otherwise not happen, they also prevent wealth from being siphoned away from peripheral areas. Kim et al. (2016) also find that CCs (and in particular Local Currencies) have been successful in communities with lower levels of income (or with higher income inequality). Therefore, CCs (and particularly mobile money) can prove a useful tool for both restoring the human dimensions of economic activity and making it socially sustainable. The cases examined have shown great promise in fostering the inclusion of those on the fringes of the economic system. Furthermore, CCs have the potential to exercise local control over financial affairs when faced with national/regional/global financial interests, regulation, and institutions.

Second, the development of an effective agent network is a prerequisite for a robust user network. Mobile money systems have been successful in economies where formal bank transactions have been limited due to distance, in crime-ridden areas where holding cash may be risky, and in so-called ‘financial deserts’ where mainstream banking services are simply unavailable. (Economides & Jeziorski, 2017). Thus, the development of dense agent networks in such settings lets individuals engage in digital

7. Polanyi used the term “social embeddedness” to describe traditional societies prior to their transformation into modern market economies (Seyfang, 2000).

8. If it circulates quickly, then it also enables higher volume of trade and facilitates a greater economic multiplier effect.

9. The face value of the scrip can only be restored when the holder adds some form of complement to it, for example, the holder has to purchase/affix a stamp.

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transactions without the need for traditional bank accounts. This growth in the agents' network has been the main reason for the successful adoption of mobile money in African contexts. Kenya is an excellent example of this. In 2015, the number of agents in the country's M-Pesa system reached around 65,000 (which is over six times the number of Kenya's bank branches (roughly 10,000)). Similarly, in 2014 the number of agents in Tanzania's mobile money system was around 45,000 (in a country with only about 580 bank branches). Finally, in Uganda, the number of agents in the mobile money system was around 41,000, versus only about 470 bank branches in the country (Suri, 2017). Overall, mobile money systems allow households in developing countries to become part of the financial system even when they are excluded from mainstream banking services. This mobile money system relies on a thriving agent network.

Third, there are other practical aspects of mobile money systems that seem to be crucial to successful implementation and usage. These include effective training of agents in handling digital transactions with transparency. User confidence and trust in agents and the technology used is a must, as this positively correlates with transaction volume. Beyond this, the low- or zero-minimum balance quality of mobile money and the inclusion of diverse features in the mobile system<sup>10</sup> greatly boosts both adoption and use. Local Currencies in particular, have been successful in sparsely populated or geographically isolated communities, possibly given people's stronger sense of belonging and solidarity. There also seems to be a 'copycat' effect. Here, communities with prior experience of alternative economic structures or that are socially close to other communities with successful CCs are more likely to adopt such schemes (Kim et al., 2016).

Last but not least, an effective, supportive regulatory framework for the mobile currency seems to be a key success factor. The greatest determinant of the practical development of mobile money systems worldwide is successful collaboration between the provider and the regulatory authorities (Lashitew et al., 2019). This has been the case for Kenya's M-Pesa system, where the provider of the mobile money system (Safaricom - a telecommunication company) and the nation's Central Bank have liaised closely and have a good working relationship.<sup>11</sup> Finally, the presence of a full-time local coordinator with strong ties to the community is key to the success of many CCs.

CCs, and mobile money in particular, are simply one step towards a new financial market that seems to hold considerable

promise. The positive potential of CCs involves fostering a renewed sense of the *social* (that is the human role) in socio-economics — one which goes beyond the dominant, purely rationalist concept of *homo oeconomicus*. The expanded development and use of CCs is compatible with the Aristotelian view that economy is embedded in the social processes needed for economic exchange and making a living. Through a conceptual discussion of selected contemporary cases of electronic and extra-State economies, this paper has explored CCs' scope: (1) as emancipatory forms of currency; (2) as a means of exchange to reduce the estrangement of economic participants from their own labor and the meaninglessness of economic activities felt by many of society's have-nots. Here, we have identified several ways in which people might be emancipated by various alternative systems of economic exchange (CCs). One does not have to be a starry-eyed Utopian to see CCs' potential for exercising greater local control and development of markets. Such developments do not necessarily wrest control from official forms of currency. By the same token, instead of undermining the roles played by traditional public and private banking institutions, they may well complement them.

## References

- ARISTOTLE. (2017). *Politics* (Translated by Benjamin Jowett). Overland Park, USA: Digireads Publishing.
- BLANC, J. (2006). "Local currencies in European History: an analytical framework." *Monetary Regionalisation. Local currency systems as catalysts for endogenous regional development*. International Scientific Conference, Sept. 2006, Weimar, Germany. Retrieved 23 May 2019 from: <https://halshs.archives-ouvertes.fr/halshs-00102974/>
- BLANC, J. (2011). "Classifying CCs: Community, complementary and local currencies' types and generations." *International Journal of Community Currency Research*. 15(D), pp.4-10. <https://doi.org/10.15133/ijccr.2011.013>
- BLANC, J. (2012). "Thirty Years of Community and Complementary Currencies." *International Journal of Community Currency Research*. 16(D), pp.1-4. <https://doi.org/10.15133/ijccr.2012.006>
- BLANC, J., & Fare, M. (2013). "Understanding the role of governments and administrations in the implementation of community and complementary currencies." *Annals of Public*

10. This was the case for Kenya's M-Pesa, in which the provider continuously developed the system. For instance, the company extended the use of mobile money to various services (such as paying bills, schooling-fees, micro-insurance, micro-credit, international remittances, transfer of money to and from regular bank accounts); and also recruited retailers both large (supermarkets, banks, utility companies, etc.) and small.

11. Although banks initially felt threatened by M-Pesa and lobbied against it, Safaricom worked closely with government institutions on various aspects of the product, such as legal compliance, product features, technical requirements, and consumer protection. This eventually convinced the banks that M-Pesa was not competing with them. The banks ended up benefiting by integrating the mobile money system into their services (something that meant fewer client visits to branches, helping banks drive down staff costs).

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- and *Cooperative Economics*. 81(1), pp. 63-81. <https://doi.org/10.1111/apce.12003>
- BORISONIK, H. G. (2016). "Key Positions about the Economic Legacy of Aristotle." *Journal of Public Management Research*. 2(2), pp. 1-13. <https://doi.org/10.5296/jpmr.v2i2.9492>
- BORISONIK, H. G. (2014). "Aristotle and the Tensions between Politics and Economy". *Journal of Finance and Economics*. 2(1), pp. 1-6. <https://doi.org/10.12691/jfe-2-1-1>
- DURKHEIM, E. (1951 [1897]). *Suicide: a study in sociology*. New York: Free Press.
- DURKHEIM, E. (1997 [1893]). *The division of labor in society*. New York: Free Press.
- ECONOMIDES, N., & JEZIORSKI, P. (2017). "Mobile money in Tanzania". *Marketing Science*. 36 (6), pp. 815-837. <https://doi.org/10.1287/mksc.2017.1027>
- FARE, M., & AHMED, P.O. (2017). "Complementary currency systems and their ability to support economic and social changes". *Development and Change*. 48(5), pp. 847-872. <https://doi.org/10.1111/dech.12322>
- GSMA. (2019). Mobile money development tracker. Retrieved 23 May 2019 from: <https://www.gsma.com/mobilemoneymetrics/#global?y=2017?v=overview?g=global>
- HARDOON, D. (2017). "An economy for the 99%: it's time to build a human economy that benefits everyone, not just the privileged few." Oxford, UK: Oxfam GB for Oxfam <https://doi.org/10.21201/2017.8616>
- KIM, S. M., LOUGH, B., & WU, C.-F. (2016). The conditions and strategies for success of local currency movements. *Local Economy*. 31(3), pp. 344-358. <https://doi.org/10.1177/0269094216637332>
- LASHITW, A. A., VAN TULDER, R., & LIASSE, L. (2019). "Mobile phones for financial inclusion: what explains the diffusion of mobile money innovations?" *Research Policy*. 48(5), pp. 1201-1215. <https://doi.org/10.1016/j.respol.2018.12.010>
- MARSHALL, A. P. & O'Neill, D. W. (2018). "The Bristol Pound: a tool for localisation?" *Ecological Economics*. 146(C), pp. 273-281. <http://doi.org/10.1016/j.ecolecon.2017.11.002>
- MARTIGNONI, J. (2012). "A New Approach to a Typology of Complementary Currencies." *International Journal of Community Currency Research*. 16(A), pp. 1-17. <http://dx.doi.org/10.15133/j.ijccr.2012.001>
- MICHEL, A., & HUDON, M. (2015). "Community currencies and sustainable development: a systematic review." *Ecological Economics*. 116(C), pp. 160-171. <https://doi.org/10.1016/j.ecolecon.2015.04.023>
- MURRAY, A. (2010). "Aristotle and Locke on the moral limits of wealth." *Philosophy for Business*. 59. Retrieved 23 May 2019 from <https://isfp.co.uk/businesspathways/issue59.html>
- PEARSON, R. (2003). "Argentina's barter network: new currency for new times?" *Bulletin of Latin American Research*, 22(3), pp. 214-230. <https://doi.org/10.1111/1470-9856.00074>
- RUDDICK, W. O., & MARIANI, L. (2013). "Complementary currencies strengthening the social and solidarity economy: case studies from Kenya." Geneva, Switzerland: United Nations Non-Governmental Liaison Service. Retrieved 23 May 2019 from: [http://www.unrisd.org/\\_\\_80256b3c005bccf9.nsf/0/e2b1e6c5d3d4127bc1257b60005013cb](http://www.unrisd.org/__80256b3c005bccf9.nsf/0/e2b1e6c5d3d4127bc1257b60005013cb)
- RUDDICK, W. O., RICHARDS, M.A., & BENDELL, J. (2015). "Complementary currencies for sustainable development in Kenya: the case of the Bangla-Pesa". *International Journal of Community Currency Research*. 19(2), pp. 18-30. <https://doi.org/10.15133/j.ijccr.2015.003>
- SANZ, E.O. (2016). "Community currency (CC's) in Spain: An empirical study of social effects". *Ecological Economics*. 121, pp. 20-27. <https://doi.org/10.1016/j.ecolecon.2015.11.008>
- SCHROEDER, F. H. R., Miyazaki, Y., & Fare, M. (2011). "Community Currency Research: An analysis of the literature." *International Journal of Community Currency Research*. 15(A), pp. 31-41. <https://doi.org/10.15133/j.ijccr.2011.004>
- SEYFANG, G. (2000). "The Euro, the Pound and the Shell in our pockets: Rationales for complementary currencies in a global economy". *New Political Economy*. 5:2, pp. 227-246. <https://doi.org/10.1080/713687774>
- SEYFANG, G., & LONGHURST, N. (2013). "Growing green money? Mapping community currencies for sustainable development". *Ecological Economics*. 86, pp. 65-77. <https://doi.org/10.1016/j.ecolecon.2012.11.003>
- STODDER, J. (2009). "Complementary credit networks and macroeconomic stability: Switzerland's *Wirtschaftsring*". *Journal of Economic Behavior & Organization*. 72, pp. 79-95. <https://doi.org/10.1016/j.jebo.2009.06.002>
- SURI, T. (2017). "Mobile money". *Annual Review of Economics*. 9, pp. 497-520. <https://doi.org/10.1146/annurev-economics-063016-103638>
- SURI, T., & Jack, W. (2016). "The long-run poverty and gender impacts of mobile money". *Science*. 354 (6317), pp. 1288-1292. <https://doi.org/10.1126/science.aah5309>
- SURI, T., Jack, W., & Stoker, T.M. (2012). "Documenting the birth of a financial economy". *PNAS*. 109 (26), pp. 10257-10262. <https://doi.org/10.1073/pnas.1115843109>
- THIEL, C. (2011). "Complementary currencies in Germany: the Regiogeld System". *International Journal of Community Currency Research*. 15, pp. 17-21. <http://dx.doi.org/10.15133/j.ijccr.2011.015>
- WEBER, Max (1992 [1904/5]). *The Protestant ethic and the spirit of capitalism*. (Trans. T. Parsons). London: Routledge.

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