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How can Complementary Currency Schemes transform communities?

The case study of the Bristol Pound

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Abstract

Title: How can Complementary Currency Schemes transform communities? : the case of the Bristol Pound.

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Over the last decade, the emergence of Complementary Currency Schemes (CCS) has shown a new promising innovative means to face big banks' austerity, following the 2008 economic crisis. Given the diversity in their design and operational model, each one of them has a different goal and impact. This study aims to demonstrate the potential of a CCS in the transformation of a community, as they are considered to be currencies created by and for the general public. Moving from theory to practice, it takes as an example the local currency, the Bristol Pound. Launched in 2012, the Bristol Pound is mainly known as one of the most successful CCS in the UK. The local currency was designed with the primary aim to boost the local economy by creating a shorter trade circuit and keeping the money inside the city.

Given the analysis of secondary data, the study focuses on the three sustainable development dimensions to highlight the Bristol Pound's impacts. In addition, it will examine all the components of social capital to understand better how the local currency empowers it.

This study can assist future or current managers of CCS with the development, evolution and strategic path they want to follow. It will help managers, intending to make a similar choice, to understand the best practices needed to make their CCS successful and enduring.

Keywords: local currency; complementary currency; sustainable development; local economy; sustainability; social capital; Bristol Pound

Sumário Executivo

Título: Como podem os Sistemas Complementares de Moeda transformar comunidades? : o caso da Libra de Bristol.

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Ao longo da última década, o surgimento dos Sistemas Complementares de Moeda (CCS) mostrou um novo e promissor meio inovador para enfrentar a austeridade dos grandes bancos, na sequência da crise económica de 2008. Dada a diversidade na sua concepção e modelo operacional, cada um deles tem um objectivo e um impacto diferentes. Este estudo pretende demonstrar o potencial de um CCS na transformação de uma comunidade, uma vez que são considerados como moedas criadas por e para o público em geral. Passando da teoria à prática, toma como exemplo a moeda local, a Libra de Bristol. Lançada em 2012, a Libra de Bristol é principalmente conhecida como uma das CCS mais bem sucedidas do Reino Unido. A moeda local foi concebida com o objectivo principal de impulsionar a economia local, criando um circuito comercial mais curto e mantendo o dinheiro dentro da cidade.

Dada a análise dos dados secundários, o estudo centra-se nas três dimensões do desenvolvimento sustentável para destacar os impactos da Libra de Bristol. Além disso, examinará todas as componentes do capital social para compreender melhor a forma como a moeda local o capacita.

Este estudo pode ajudar os gestores futuros ou actuais da CCS no desenvolvimento, evolução e caminho estratégico que pretendem seguir. Ajudará os gestores, que pretendem fazer uma escolha semelhante, a compreender as melhores práticas necessárias para que a sua CCS seja bem sucedida e duradoura.

Palavras-chave: moeda local; moeda complementar; desenvolvimento sustentável; economia local; sustentabilidade; capital social; Libra de Bristol

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List of abbreviations

BP	Bristol Pound
BCU	Bristol Credit Union
BPCIC	Bristol Pound Community Interest Company
CCS	Complementary Currency System
LETS	Local Exchange Trading System

1. Introduction

The heavy combination of climate change, the rapid loss of biodiversity and the rise of extreme inequalities have put Humanity in a very fragile position where it faces today an unprecedented and interconnected global crisis (Røpke, 2020). In the middle of a global economic, ecological (Mellor, 2010) and sanitary crisis with the worldwide outbreak of COVID-19, we need to rethink our way of living. It is evident that our society is in the need for change. We are lacking a more sustainable and resilient environment with reference to the economic, monetary, health and political system, judged inadequate in their scale and ambition. The concern is that the main economic philosophy of today's society is to outperform the annual economic growth (North, 2007). Big corporations are obsessed in reaching higher levels of production, consumption and investment. Moreover, poor people are getting poorer, on the other hand, rich people are getting richer, revealing an amplification of disparities in the economy (Daly and Farley, 2011) and the decline of local economies (Strange and Bayley, 2009; Hagens, 2020). The leak of financial resources going from poor to wealthy percentage of the population is another hint that the conventional economic and monetary system is unsustainable. Regional disparities within advanced countries in terms of real output, employment and productivity have received increased attention in recent years, against a background of growing social and political tensions. Adjustment is slower in lagging regions, where shocks have more lasting negative effects on economic performance (IMF, 2019). With daily reminders, we should now know that the global economy isn't working as it used to (Hagens, 2020).

As a response, to regional disparities, the decline of local economies and the decrease of natural resources (Jackson and Senker, 2011), new economic approaches have been brought up. These latter approaches favour objectives oriented towards the well-being of the population and the development of community sustainability, and not only towards economic growth (Seyfang and Smith, 2007; Fraňková et al., 2014). The priorities have been revisited. Instead of being focus on the traditional bottom line - financial performance - two other variables have been included into the equation: social/ethical and environmental performance (Norman and McDonald, 2004; Longoni and Cagliano, 2018). Besides, these new economic approaches encourage alternative conceptions of wealth and progress; ethical business models and new systems of money (Seyfang and Longhurst, 2013). Their big challenge is to create new systems of exchange that empower sustainable consumption behaviours (Seyfang, 2009; Southerton et al., 2004; Hahn et al., 2014).

To be able to reach sustainability, developing a new monetary system is the critical point (Boyle and Simms, 2009). Indeed, over the last few decades, we can observe the emergence of new monetary systems such as community currencies, inter-enterprise currencies or cryptocurrencies (Meyer and Hudon, 2019). They have been created and developed by citizens, NGOs, non-profit organisations besides banks, governments or local authorities (Seyfang and Longhurst, 2013). These new monetary systems represent a new means of exchange and in the process create new circuit of value, shorter than the conventional one (Seyfang and Longhurst, 2013). This thesis will focus on the new monetary system named Complementary Currencies Systems (CCS) that are new tools promoting sustainable development (Lietaer, 2001). CCS put the community at the centre of their priorities and follow the “not for private profit” basis (Collom et al., 2012). Geographically delimited, CCS serve functions that conventional money cannot (Meyer and Hudon, 2019; Lietaer, 2001). For instance, they help keeping the circulation of money local, they provide liquidity in areas where money is scarce, and they enable people to meet their physical and psychological needs. Therefore, by complementing the official currency, CCS build more sustainable incentives and structures (Douthwaite, 2000; Dittmer, 2013).

This teaching case study focuses on the case of the Bristol Pound (BP), a Local Currency circulating in the city of Bristol and the county of Avon (South-West of England). The BP aims to create a more resilient independent business sector in Bristol but also a fairer and more inclusive local economy by transforming how individuals and organisations behave financially. This dissertation has for goal to understand the role of CCS in the building of more sustainable and more resilient local economies and communities.

Hence, the problem this thesis strives to understand is how a CCS such as the BP can transform the communities in which it circulates. The following teaching questions are addressed :

1. To what extent has the Bristol Pound a sustainable socio-economic and environmental impact in the local economy?
2. To what extent is the Bristol Pound empowering social capital?

To develop the case study, the author of the thesis contacted the BP organisation for interviews. The BP team has provided the author relevant documents and results from surveys but have been unavailable for the interviews due to particular current situation. Therefore, the author of

this dissertation gathered and analysed secondary data (see Figure 1). The teachings notes are there to encourage students to take clear and organized steps in answering the previous teaching questions.

Data collection table		
Source	Subject	Objectives
Internal documents	Reports and survey results regarding the BP's impact and users' behaviours	Appropriate documents to analyse different insights of the BP organisation, especially their impact on the local community
Webpage articles and public documents	BP's website, BP's YouTube channel, BP's blog, Online articles, Public reports on the BP; Academic reports	General understanding of the BP's mechanisms; Understand BP's vision for the future and their current ambition; Understand the current state of the BP; Analysis of local currencies related to sustainability; Gather information to analyse BP's social capital

Figure 1. Secondary sources

2. Literature review

2.1. Complementary Currency Systems (CCS)

2.1.1. CCS design

Complementary Currency Schemes (CCS) define a specific unit or system of accounting (Fare and Ahmed, 2017). They represent a broad family of currency systems that exist and complement official national currencies. They are in circulation within a well delimited territory, region or community, and mediate the exchange of goods and services without carrying any interest (Lietaer, 2001). In other words, CCS have set up trading networks in defined geographic regions to account for and regulate the exchange of goods and services. It aims to help transactions with locally owned businesses and shops. Inspired by green movements (Michel and Hudon, 2015), they are mainly developed by non-governmental organizations, non-profit organizations, enterprises, local authorities, associations, foundations and informal groups of individuals. Since the years 1980s, they have been popular and have been multiplying in developed and in developing countries. We can, however, track back the very first CCS to the 19th and early 20th century. It is difficult to provide an exhaustive list and a specific fix number of these projects, but over the last decades, CCS have witnessed a drastic growth (Lietaer, 2001). More than 3000 clusters of projects in more than 23 countries were recorded (Seyfang and Longhurst, 2013). They are considered innovative social experiences because they allow (more or less successfully) significant social needs in health, exclusion or educational matters (Lietaer and Belgin, 2012).

They are various motivations to create such innovative systems. Some of the projects were designed as an answer to crisis situations to protect local employment. For instance, the emergence of CCS in Catalonia (Spain) was due to the most recent economic crisis that hit hard Spain in 2008. CCS were viewed as an economic alternative to gain control of the situation (Conill et al., 2012). Moreover, with the most recent outbreak of CCS, they set themselves deliberately as grassroots innovations with the aim of promoting sustainable development (Colacelli and Blackburn, 2009). Some CCS are trying to ease the transition to a much lower energy society and economy (Joachain and Klopfert, 2014).

To be a member of these systems, individuals commit themselves to respect social and ethical rules. These atypical monies are accepted only from approved service providers members of the association. The providers meet criterion related to sound and responsible practices. A CCS

is therefore a tool for trade but also a local network of professionals and consumers that are willing to put meaning into their purchase actions. CCS have for purpose to give back currency its primary function: a tool to trade, interact and bond. This function is put at service of local development while complementing an official currency already in circulation in the country. They are there to help the community in many different aspects: fulfil sustainable economic, social and environmental requirements (Michel and Hudon, 2015).

Many expressions are used to describe CCS. This leads to confusion and contestation in the terminology. Alternately, they are called local / alternative / parallel / community / complementary / social currencies (Blanc, 2011; Lietaer et al., 2012; Meyer and Hudon, 2019). For reasons of clarity in the understanding of this thesis, only the terms CCS will be used.

2.1.2. CCS motivations and objectives

Despite their context of development, we can identify four main motivations that differentiate CCS from conventional monetary system. CCS can follow one or more of these following objectives (Fare, 2011):

- Switching global transactions into local transactions by privileging local use of revenues from local production. The goal is to constitute a complementary circuit to the current economic circuit running. They are seeking a short circuit promoting the integration of local suppliers and applicants. It is to enlarge the local economy by helping people who are excluded from society (unemployed) and push them to participate in activities thanks to their skills. In being part of a productive work, this will boost their self-esteem.
- Creating social networks by stimulating local trades. In the long term, it will form bonds of reciprocity between people of a same circle. It must be beneficial to the citizens.
- Transforming current practices and incorporating new practices of consumption and production into the way of life. CCS orientate consumption as to make it more responsible, more respectful of sustainable development and more ethical. They have to follow and respect social and ecological standards.
- Consolidating the social use of money and entail citizens into the economic and monetary decision making.

2.1.3. CCS typology framework

With the quick and abundant multiplication of CCS since the 80s, we can note the diversity in terms of design, scale and objectives. CCS can be designed to promote sustainability behaviour (Joachain and Klopfert, 2014), build community social capital (Seyfang, 2004) or foster trade and local development (Kennedy et al., 2012; Vallet, 2016). They vary in their organizational characteristics which are their methods of evaluation, currency design, circulation forms, convertibility, currency supply, geographical space covered (North, 2014a,b). Classifying them has been a challenge (Meyer and Hudon, 2019) due to the rapid innovation of the field in which they operate and the weakening of the borders (Blanc, 2011; Martignoni, 2012; Seyfang and Longhurst, 2013). Blanc (2017, p.3) explains that the

“Attempts to construct typologies and proposals for naming moneys have generally proved disappointingly incoherent or unsystematic, as if the subject of analysis itself were not amenable to any stringent form of classification”.

We can essentially identify four main types of CCS: Mutual Exchange Currencies; Service Credits; Local Currencies and Barter Market Currencies (see Appendix 1).

2.1.3.1. Mutual Exchange Currencies

First, Mutual Exchange Currencies is mostly referred as LETS generation. LETS (Local Exchange Trading Schemes) was developed in Vancouver Island (Canada) in 1983 by Michael Linton (Fare and Ahmed, 2017; Seyfang and Longhurst, 2013). LETS was invented in response to an economic depletion during which community members were unable to trade because of monetary scarcity (Meyer and Hudon, 2019). Moreover, LETS in England was founded just after the Black Monday crash in 1987 and its consequent recession that followed.

LETS and Mutual Exchange Currencies systems rely on debits and credits created during the exchange. When two members of the system exchange goods or services, one of them is credited in his account and the other one is debited the same amount (Seyfang, 2010). The credit is free of charge. Based on honesty, the total of all accounts must always be equal to zero, it must be balanced. This is called deposit money. In other words, the principal is to register account balances in a computerized system. The trust between the members preserve the value of currency (Michel and Hudson, 2015). In addition, some versions of LETS use paper money. Yet, both paper and deposit money have a non-legal convertibility characteristic (Fare and Ahmed, 2017). Members of LETS don't have the legal right to convert their social money into

the national currency. Mutual Exchange Currencies' purposes balance between social and economic. They encourage social inclusion; social links but also provide mainly interest-free credit and push towards import substitution. Mutual Exchange Currencies are the most successful at building community spirit and social capital (Seyfang and Longhurst, 2016).

2.1.3.2. Service Credits

Service Credits (i.e. Time Banks and Time Money) represent the most common type of CCS. Time Dollars (USA) and UK Time Banks are popular examples. They are time-based currencies but, just as LETS, they work as mutual credit. Each member receives a time credit for each hour they contribute to a service to another member. They can use their credits to benefit from someone else's service. Hence, everybody's time has the same value (Michel and Hudson, 2015). They are often closely connected to local authorities and normally run by institutions (health, education, community development partnerships) (Seyfang and Longhurst, 2016). As for Mutual Exchange Currencies, Service Credits are non-convertible into national currency. To finish, their goals are more social to economic: forge social capital, social cohesion and inclusion. They aim to meet members' social and economic needs and encourage civic engagement in areas of social fragmentation and disadvantages.

2.1.3.3. Local currencies

The third typology of CCS are Local Currencies. Some of the most famous examples of Local Currencies are Community Banks (Brazil); Ithaca Hours (USA); Abeille (France); and Bristol Pound (UK). They use paper money slips or electronic forms for the most high-tech ones. Electronic payment systems are convenient and efficient just what users are looking for (Seyfang and Longhurst, 2016). They circulate in geographically defined region. The conversion from national currency to local currency is possible but at fixed rates. If individuals want to trade their local currency into official money, it is some of the time not possible. Nevertheless, it is doable to trade in this way for shops and enterprises but with penalties (i.e. Eusko in France). An exception is the Bristol Pound, known as a Convertible Local Currency, in which they don't charge you for the reverse conversion. This typology of CCS is planned to cover daily consumption. Agreements between shops or enterprises can be made to facilitate the system. Even partnerships with local banks and local authorities are being developed. Local Currencies main purposes are to complement the national currency, boost local economic

activities and support local businesses. Some Local Currencies are designed to make areas more resilient and more suited to cope with climate change and peak oil by re-localizing sectors (farming, business, healthcare, energy) (Fare and Ahmed, 2017).

To better understand, we can take a closer look at a community bank in Brazil. Banco Palmas promotes territorial development of a deprived and marginalised community (Conjunto Palmeira) in the outskirts of city Fortaleza (North-East of Brazil) (Melo and Braz, 2013). This local currency is issued and managed by the Instituto Banco Palmas; a community self-managed microfinance organisation founded in 1998. Their objective is to generate employment and incomes for the members of the community (Hudon and Meyer, 2016). Palmas was created to boost the consumption in the marginalised neighbourhood. As a result, in 2011, 93% of the community citizens were consuming in the Conjunto Palmeira compared to 1997, where only 20% of the inhabitants were consuming (França Filho et al., 2012). Palmas served as a great example of grassroots experiments to alleviate poverty (Meyer and Hudon, 2019). They helped generate a model of community development banks mixing microcredits and community currencies. This model was diffused in more than a hundred communities throughout the country.

2.1.3.4. *Barter Market Currencies*

Barter Market Currencies allow participants to exchange goods and services at a specific event or site, without using mainstream money. The members of the Barter Market trade with a special market currency in a defined place at a certain time of the day. To have access to this money, users have to register with the Barter Market organisation. Users receive a certain amount of money and must then provide goods or services to retain their access (Gómez and Wit, 2015). This money circulates for the day, allowing high volume of transactions (Seyfang and Longhurst, 2016). The goods exchanged are generally self-produced or second-hand products. The prices are set by exchangers. This category of CCS has mixed characteristics from both Local Currencies and Mutual Exchange Systems (Seyfang and Longhurst, 2013). The most famous example of Barter Market Currency is the Argentinean Redes de Trueques.

2.1.4. CCS difficulties

In many studies and literature reviews, CCS are questioned about their capacity to achieve their purposes as in boosting the local economy and promoting social integration. (Fare and Ahmed, 2017). Most of these studies (through surveys) revealed challenges to diffusion and extension (Williams et al., 2001; North, 1998). These obstacles related to their economic goals consisted of:

- attracting new participants into the system
- widening from a niche of products to a whole new range of available and accessible products and services
- achieving promising impacts
- durability, growth and legitimacy

In addition, CCS need to be very clear on their legal framework. Regarding taxation, as CCS allow exchange, they are of course relevant to taxation and related risks in terms of either taxes or social security obligations. It must be highlighted that CCS are not designed to avoid these obligations. Therefore, there is a need to clarify the position of governments for taxation of exchanges in these alternatives systems (Williams et al., 2001; North, 1998) to increase their legitimacy.

Furthermore, CCS use monetary signs. They need to be attractive (pleasant, simple to use, identifiable, ...) but also difficult to reproduce as for conventional money (Greco, 2001). The risk of counterfeit should not be underestimated. Admittedly, the production process is less sophisticated and controlled than conventional banknotes, but in almost all cases the issue of securities is entrusted to or carried out in close collaboration with the banks involved in the alternative system.

Finally, apart from the users' fear of debt and lacking of funding to continue the experiment (Fare and Ahmed, 2017); the last difficulty would be that in the event of an interruption in the operation of the CCS, stakeholders maybe won't be able to convert into national currency their local currency securities.

2.2. Sustainable development

2.2.1. Sustainability

Sustainable development means to reach the current needs without putting at risk the ability of future generations to meet their own needs (United Nations, 1987). This definition has directly influenced popular framings of the term sustainability today. Sustainability has been framed into three dimensions involving all aspects of our world: economic (profit), environmental (planet) and social (people) dimensions, which are called the triple bottom line (Elkington, 1997; Choi and Ng, 2011; Glavas and Mish, 2015). Despite the recent attention and care that these several dimensions receive, the need to address sustainability has been focused on each dimension separately (Choi and Ng, 2011).

Sustainability has been among most important topics in political science over the last few decades (Bernauer, 2013). Now, sustainable development is being challenged by today's monetary system for two motives (Robertson, 1999). Current monetary system mechanisms have had critical effects on the society and the environment, but they are also threatening sustainability.

CCS's main vision is to reject the foundation of a capitalist system (what it represents and the creation of money). The primary goal of CCS is to make new monetary system more resilient. CCS are tools to stimulate and activate a sustainable development (Greco, 2001). They prioritize social economy, local autonomy and thanks to bottom-up solutions, they rest their focus on communities' interests (Seyfang and Smith, 2007). CCS could be an appropriate tool for sustainability due to its potential to improve the community's resilience and social capital (Sanz, 2016).

2.2.2. Economic sustainability

The economic activities of CCS are too low and insignificant at a big scale (Michel and Hudon, 2015). For instance, Redes de Trueques in Argentina, considered as the most successful Barter Market Currency, added value to the country's GDP of just 0,6% (Colacelli and Blackburn, 2009). Studies on LETS Australia (Birch and Liesch, 1997), UK LETS (Seyfang, 1997) and French SOL (Fare, 2012) have shown that levels of trades are too low to have a meaningful impact on local economies. Nevertheless, despite having an overall limited effect and impact, CCS have been significant for marginalised segments of the population (Michel and Hudon, 2015).

According to Michel and Hudson (2015, p.161),

“economic sustainability is grounded in the recognition that natural resources are being depleted on an increasingly large scale by the economic system”.

Thus, CCS are key tools for sustainability because they can build a short local circuit of economic values. When money stays local, it prevents the leak of wealth and stimulates the economic multiplier (Hopkins, 2008; Seyfang and Longhurst, 2013). It will lead to the increase of inhabitants' incomes therefore improving the quality and standards of life of the community. CCS promotes local economic activities by stimulating the consumption of the community (Michel and Hudson, 2015). In addition, informal / domestic / voluntary work and exchange of skills are valued and prized compared to formal labour market. It will lead to more lively economic relationships where sharing, helping and cooperation is honoured (Seyfang and Longhurst, 2013). CCS are effective ways to give access to goods and services otherwise not affordable. People who were once financially excluded or unable to formal work, will have another way to reach goods and services (Williams et al., 2001). Studies on UK LETS (Williams et al., 2001) demonstrate that 27,4% of goods and services would not have been acquired in the absence of the LETS system. CCS can promote sustainable economic development among local shops and businesses, since the latter show more loyalty to local communities. Mutual credit is allowed among local businesses which means you can trade without the need for cash (Shuman, 2000). They have market advantage. To finish, CCS may incite the creation of small enterprise and boost the entrepreneurial spirit by directly supporting social enterprises and sustainability-oriented businesses (Fare, 2011), improving employability (Michel and Hudson, 2015).

2.2.3. Social sustainability

This dimension of sustainability refers to the well-being of citizens and communities as a noneconomic form of wealth. The challenge of social sustainability is finding a balance between individual and societal needs and the capacity of nature to support human life, activity and ecosystem (Choi and Ng, 2011).

CCS empower social capital, promote cooperation and cohesion within a community. It is beneficial to all. The trust built upon strong relationships between businesses and users, comes from the blooming of a small circuit of exchanges. With exchanges citizens can interact and build their social networks (Michel and Hudson, 2015). Members forge better relationships and

greater friendships. Because everyone's time and skills are valued equally, they are confident enough to participate more in the community.

CCS is a tool to tackle social exclusion by empowering marginalised groups of citizens; allowing the participation of all, without any charges; and giving access to goods and services otherwise not accessible to financially excluded people (Fare, 2012; Jacob et al., 2004). The groups that benefit from the social inclusion are :

- Unemployed citizens (Seyfang, 2001; Gómez and Helmsing, 2008; Williams et al., 2001)
- Low income citizens (Fare, 2012)
- Elderly

Finally, CCS can have psychological impacts on its users. They may boost their self-esteem and confidence by valuing their work or skills (not recognised otherwise), by connecting with different people, by being employed. CCS contribute to more ethical and equitable relationships of exchange, away from the first objective of economic growth (Michel and Hudon, 2015).

2.2.4. Environmental sustainability

CCS may have positive environmental impacts. There is a limited number of studies assessing the environmental impact of CCS, so it is difficult to come to any long conclusion (Michel and Hudon, 2015). There is little explicit evidence that shows that CCS promote environmental sustainability in its results. Kennedy et al. (2012) explains this with the small number of projects that have environmental aims. However, we can still make gather some assumptions that are yet to be proved.

Firstly, by enabling more localized businesses and behavioural consumption patterns, CCS are claimed to reduce ecological footprints. Thanks to import substitution, energy required for transportation are lowered (Douthwaite, 2000). Moreover, as we saw in the previous section, CCS create social bonds. If citizens now prefer social interactions rather than material consumption to meet their psychological needs (recognition and self-esteem for example), they participate, unconsciously maybe, in reducing their own ecological footprint (Seyfang, 2010). Furthermore, if citizens prefer to spend their money in local businesses, they help sustaining the environment by keeping the resources local and encouraging environmentally friendly

attitudes (Caldwell, 2000). Some CCS raise citizens' awareness about environmental issues (Michel and Hudson, 2015) by directly addressing pro-environmental behaviours - some reward citizens when they participate in a recycling incentive. They can also facilitate the sharing of resources and give second chances to unwanted goods in an accessible reuse market (Botsman and Rogers, 2010). Adopting a sustainable consumption is key. Finally, CCS can potentially encourage the creation and growth of new green technologies, for example in the renewable energy industry by raising investment capital (Turnbull, 2009). To conclude, CCS could be used as tools for recycling, reducing pollution and fostering environmental education (Michel and Hudson, 2015).

2.3. Social Capital

Compared to conventional currency design, CCS cannot be stored; no interest is being charged; and their value is backed by mutual trust, transparency and the participation of the users (Lietaer and Belgin, 2012; Lietaer et al., 2012). Members change in their social attitudes. They become more cooperative, trustful and trustworthy, equitable and value reciprocity in their exchanges and relationships. Those behaviours produce social capital, an element of the community resources (Sanz, 2016).

According to Putnam et al. (1994, p.167), social capital is

“Features of social organization, such as trust, norms and networks, that can improve the efficiency of society by facilitating coordinated actions”.

Social capital can be developed, preserved or destroyed (Coleman, 1994), however, it cannot be accumulated by any personal investment standard mechanism, unless it is through social participation (Antoci et al., 2005). It has been proven to be a powerful factor explaining actor's relative success in several arenas of central concern to organizational researchers (Gabbay and Zuckerman, 1998; Lin and Dumin, 1986; Hansen et al., 1999; Chung and Gibbons, 1997; Uzzi, 1997). From many definitions of social capital (Putnam, 2000; Bourdieu, 1986; Coleman, 1994; Fukuyama, 1995; Szreter, 2000), we can conclude that the premise of social capital is trust, reciprocity, norms and networks. However, social capital needs to be look after, it needs maintenance (Adler and Kwon, 2002). The social bonds created by social interactions need to be renewed and reconfirmed, otherwise they will lose their efficacy. Furthermore, social capital

is not located in the actors but in their relationships, unlike other forms of capital. It takes mutual commitment and cooperation from both parties to generate social capital. The disadvantage of social capital is that it only takes the abandonment by only one party to destroy it.

Social capital has various attributes, deeply rooted in relationships. Three different clusters can be formed: the structural, relational and cognitive dimension (Granovetter, 1983) discussion. Figure 2 presents the different dimensions of social capital.

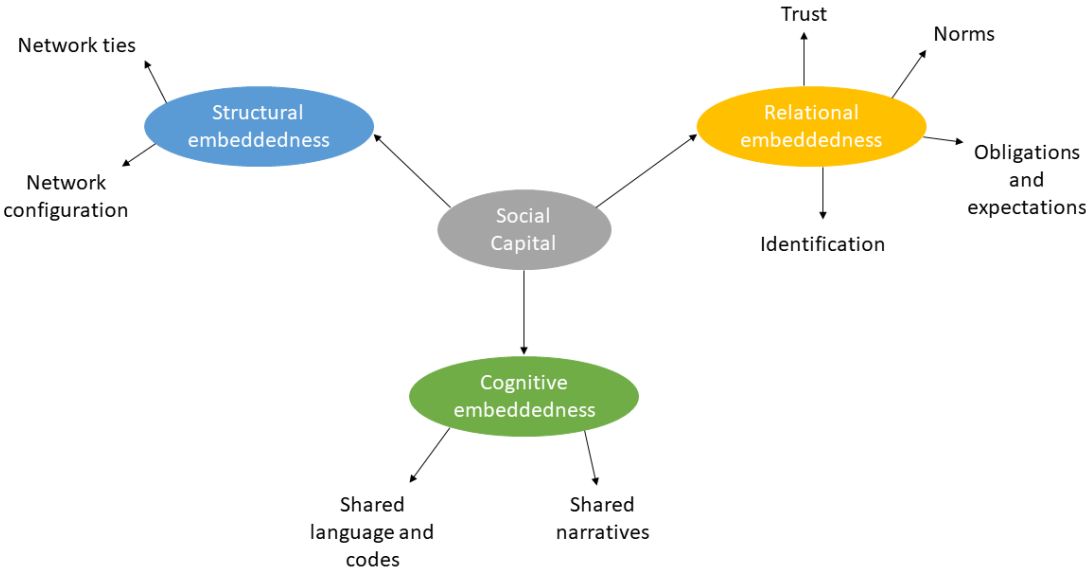


Figure 2. Social capital’s dimensions

2.3.1. Structural embeddedness

It pictures the impersonal configuration of connections between individuals or units. Consequently, it shows the different linkages patterns between actors.

2.3.1.1. Network ties

Network ties give access to resources (Scott, 1991; Wasserman and Faust, 1994). The social relations created by interactions between individuals or collective actors, constitute information channels. These channels reduce the amount of time and the investment necessary to gather information. Information is crucial (Coleman, 1988), it provides the foundation for action, but

is costly to gather. In other words, the who you know will influence the what you know. These information benefits occur in three distinctive forms:

- Access: it refers to receiving a valuable piece of information and knowing who can have access to it.
- Timing: it refers to the capability to make available information sooner than without such contacts. It is useful for success and against competitors (Nahapiet and Ghoshal, 1998).
- Referrals: it constitutes a flow of information where actors part of the network must face reputation (Granovetter, 1983; Putnam et al., 1994).

2.3.1.2. Network configuration

Compared to dense networks, sparse networks have few redundant interactions and contacts and therefore provides more information benefits (Burt, 1992). These benefits come from the diversity of information and their lower cost of access. The configuration is thus a channel for knowledge transmission.

2.3.2. Relational embeddedness

This dimension focuses on specific relationships people have (respect, friendship) influencing their behaviours (Granovetter, 1983). Relationships push social motives fulfilment as sociability, approval and prestige (Nahapiet and Ghoshal, 1998).

2.3.2.1. Trust

According to Misztal (1996: 9-10), trust could be defined as the belief that the “results of somebody’s intended action will be appropriate from our point of view”. Most of the time, it leads to one party at least being vulnerable (Mishra, 1996). An individual would be willing to trust another party if he believes in the good intent of the latter (Ouchi, 1981; Pascale, 1990; Putnam et al., 1994), in his competences and capabilities (Sako, 1992), in his reliability (Giddens, 2013) and his perceived openness (Ouchi, 1981).

When trust is high, individuals are more willing to cooperate (Fukuyama, 1995; Putnam et al., 1994), to engage in social interactions (Putnam et al., 1994), to take risks (Nahapiet, 1996; Ring

and Van de Ven, 1992). In a context where uncertainty and ambiguity are high, trust is important. It increases the ability of a system for coping with complexity and diversity and forges relationships (Sanz, 2016).

To conclude, collective trust may be a powerful asset (Knez and Camerer, 1994). Having trust in a relationship is critical for social cohesion, economic achievement and the commitment of members (Dale and Onyx, 2010). Yet, in a community where they lack mutual trust, people will adopt individualist principles, only caring about their short-term personal benefits (Banfield, 1967). In these communities, citizens have trouble gathering common resources to solve collective problems (Gao et al., 2019). Without cooperation and reciprocity, people disconnect from their communities and relationships and experience social isolation (Dale and Onyx, 2010).

2.3.2.2. Norms

Social norms are accepted rules that govern the members' behaviours in a group (Bicchieri, 2006). Individuals have a strong tendency to follow local social norms (Akerlof, 1980, 2007; Cialdini et al., 1991; Sunstein, 1996). These collective norms depend on shared values. To avoid any domination of personal interest over behaviours, there must be a high level of reciprocity among the group (Sanz, 2016).

Moreover, in a community where social capital is high, there should be strong social norms that support cooperation among individuals (Gao et al., 2019). Cooperation is essential, it is the element that keeps people connected and implies unions and shared work to achieve common goals (Sanz, 2016). Individuals in communities with high level of social capital tend to share strong norms of trust and reciprocity, promoting cooperation and facilitating the resolution of collective issues.

Violating those social norms has a significant impact on the person's moral state (Elster, 1989; Lindbeck, 1995; Posner, 1997). It can trigger negative resentment such as shame, anxiety, guilt (Elster, 1989). To prevent this, individuals have strong incentives to obey social norms (Gao et al., 2019).

2.3.2.3. *Obligations and expectations*

Obligations are a commitment or a duty to tackle some activity in the future (Nahapiet and Ghoshal, 1998). They can be used as a credit slip (Coleman, 1990). Thus, the credit is held by a party to be discharged by a performance of another party (Bourdieu, 1986).

2.3.2.4. *Identification*

An individual would identify with another person or a group if he can project himself in the person or the group (Nahapiet and Ghoshal, 1998). The identification may come from a group membership. The individual will take the values and standards of the group as a comparative reference frame (Merton, 1968). Identification enhances the concern for collective outcomes (Kramer et al., 1996), the frequency of cooperation and perceived opportunities for exchange. In groups where individuals have different and/or contradictory identities, they will experience some difficulties in information sharing, learning and knowledge creation (Child and Rodrigues, 1996).

2.3.3. Cognitive embeddedness

This social capital dimension focuses on the resources providing shared representations and interpretations of meaning among a group of individuals (Cicourel, 1973).

2.3.3.1. *Shared language and codes*

Language is very important in forming connections with people. It is the means by which you communicate, exchange information and knowledge, but also manage a business. If people share a common language, it will facilitate their access to other people, relations and information. When languages and codes differ, it keeps people apart and restrict their access to information and knowledge. To finish, parties must have an overlap in knowledge. A shared language and codes increase the combination of capabilities and information. For instance, the existence of a shared vocabulary and a group communication codes, benefit the whole group and represent a valuable asset within a firm (Arrow, 1974).

2.3.3.2. *Shared narratives*

Through stories, myths, metaphors or a shared narrative within a community, it will develop a powerful means for creating, exchanging and preserving rich sets of meanings and interpretations of events (Clark, 1972; Nisbet, 1969).

3. The case study

“It is the people of Bristol that makes it so special, they have an independent spirit that makes it quite unique” - Ciaran Mundy (Chief Executive Officer of the Bristol Pound)

3.1. The Bristol Pound

The Bristol Pound (BP) is a local currency scheme for the city of Bristol designed with the primary aim of boosting trade and spending with local and independent businesses. This scheme is the UK’s first city wide local currency, the first to have electronic accounts managed by a financial institution, the Bristol Credit Union (BCU), but also the first local currency that was used to pay local taxes (Calvo and Morales, 2014). After three years in development, the BP (see Appendix 2) was launched in September 2012, backed by the Bristol City Council and the BCU (Bristol Pound, 2020). It was a great success to the scheme because it managed to attract more than 1 million people in one week. The BP results from the collaboration between a few different organisations: financial institutions, local authorities, new economic foundations, transition networks... Together, they support communities and push them to try a range of sustainable activities.

Bristol is one of the largest cities in the UK and considered to be one of the most cultural cities in the country. It hosts many students coming to study at the University of Bristol. As a major seaport of the country, Bristol is economically dynamic and diverse. It is well known for its long tradition of commodities such as wool cloth, exportation and importation of fish, wine, grain and dairy products (Calvo and Morales, 2014). In contrast to other local currency in the world, the BP was implemented in not a particularly deprived city, Bristol having one of the highest per capita GDPs in the UK. Ciaran Mundy (CEO of the BP) explains that after living in lots of different places, it was the first time he had come to a place where that sense of what is important to people, felt different. In Bristol, there is a diversity of ways of living which felt important not just for the sake of sustainability but for the feeling of possibilities in the city, coming from the citizens themselves. Bristol is a very diverse place in terms of businesses, trades, independent locally owned businesses. It has an inspiring spirit. They have a thriving independent sector compared to many areas in the UK, sealing in the culture of Bristol this “give it a go” mindset. As Michael Lloyd-Jones, the Trade Manager of the BP claims:

“Bristol encounters the best of the British costumes: it is entrepreneurial oriented and traditional practices such as the afternoon cup of tea (...) [are] performed in the everyday life”.

Moreover, Bristol has a strong collective vibe and preserves the British traditions. A business owner adds:

“Bristol is a very dynamic city (...) In terms of business, the city is very supportive of the locals; we support each other, and this is something that makes the city unique if we compare us with other areas in the UK”.

Bristol is affected by global forces; the big banks have brought them austerity and large businesses bring inequalities and low paid repetitive works. Banking and money should work together to support people, not to exploit them and that is why the BP was created. This project was designed to be city-wide because it is big enough to feel significant. It reassures the citizens that their money is spreading across the city and having therefore a real economic impact.

3.1.1. Bristol Pound’s governance

Most CCS are influenced by other existing projects. In this case, the Brixton Pound greatly influenced the BP in terms of governance and operational model.

The BP is backed by the Bristol Pound Community Interest Company (BPCIC) which helps to ensure that the local currency is run in the public best interest. A CIC is a new type of legal structure created and designed for social enterprise initiatives in 2005. They were established to distinguish them from charitable organisations within the charity commission (Nicholls, 2010). Just like the Brixton Pound, it is a not-for-profit organisation. This legal structure influences their management style and operations. All the transactions fees go to the BPCIC to support the operational costs. BP is also backed by the BCU which axes as the bank that guarantees the holds of BP and guarantees them with a physical Sterling. In addition, as the BP scheme has a democratic governance structure, the Board of Directors composed by local businesses and founders meet once a month to discuss the organisation and to make decisions within the structure. Members of the Board of Directors have a say in how the decisions are made and where goes the spending. And finally, everyone joining the scheme whether it is an individual or a trader, has an impact on the BP and how the currency is spent.

3.1.2. Bristol Pound's operations

If you live, work, study in Bristol, you can open an account with the BCU. For every sterling put on their account, users will be credited 1 BP. It has the same value as sterling (Bristol Pound, 2020). Members can do online payments, withdraw cash at local cash points, pay with the application or pay by mobile phone text. However, anyone can use the paper BP, if they respect the rules (see Appendix 3).

3.1.2.1. The Bristol Pound account

The BP account has many functionalities. A member can make a one-off payment to another member; set up a regular BP payment; view his/her scheduled BP payments; cancel payments. With BP account, any employee can make the request to their employer to be paid in BP, a useful way to top up their account. The employee can specify the amount of BP he would like to receive as part of his salary. On the other hand, it is an easy way for the employer to commit to the local currency scheme. The employer can send the request electronically to their BP account otherwise big employers can sign up as a “Payroll partner” at the BCU.

3.1.2.2. Paying by the application

Available on iOS and for Android, the application is the best way to spend digital BP. There are no fees to download the app, only transaction fees, levied on the recipient of funds, just like a regular debit or credit card. The transfers are charged at a 1% fee, the latter capped at 1 BP.

With the app, users can monitor their spending month to month, viewing how much BP they have injected in the local economy. Furthermore, the app is backed by a map and an online directory, pointing out every participating business, local cash points, the BCU, Bristol tourist information centre. They can also use the filters to show only a certain type of business. For instance, if a member wants to have lunch, he can use the filters that shows only restaurants or cafes.

3.1.2.3. Paying by text

Before the launch of the app, Text-2-Pay was the main payment channel. Now the BP encourages their users to privilege the app. Text-2-Pay is the backup option if they don't have

any paper BP. Text-2-Pay has a major inconvenient: the system can be disrupted by bad intermittent mobile signal which can be very frustrating for both counterparts. BP is soon going to remove Text-2-Pay entirely due to the ongoing customer frustrations.

3.1.2.4. *Paying by paper BP*

Anyone can use the paper BP and any business can accept it, they just have to say yes as it relies on a volunteer system. This means of spending the local money is very simple. It works like a gift voucher meaning that you can enter a shop part of the scheme with £100 and ask to swap it against 100BP. They have the same value : £1 for 1BP. Furthermore, members can use it alongside sterling as well, it is complementary. For instance, when paying for a glass of wine (£7), they can give 5BP and £2. Regarding the bank notes, the BP has several bank notes : 1 / 5 / 10 / 20 (see Appendix 4). They work the same as sterling and have similar security features.

The BP is not legal tender. Only the Bank of England can print legal tender. Therefore, as the BP works as vouchers, they have an expiry date. The current edition of BP has an expiry date of September 30th, 2021. And finally, the paper BP is not exchangeable back into sterling. Only trade members can redeem paper BP into their BP accounts at certain cash points.

3.1.3. Bristol Pound's characteristics

To better understand the concept of the BP, here are some key important characteristics:

- The BP is **legal**: the Bank of England recognizes the existence and role of local currencies (Bristol Pound, 2020).
- The BP is **secure**: they have put much effort to make sure the electronic system and the paper notes have as much security as one should have compared to a traditional bank note or electronic transaction. The paper notes have highly security features, holographic images and water marks (see Appendix 5).
- The BP is **simple**: the BP team tries to make it simple, hence the paper notes working as a complementary money to sterling. They also try to avoid as much as possible confusion on how it operates in terms of taxes. The BP operates the same way for the taxman.
- The BP is **innovative**: there are not many local currencies in the UK that have attempted to be as big in terms of scale and level of development. Very few local currencies in the

world have reach the technological standards of the BP with their advanced way of payment. The Text-to-pay was a big innovation across CCS.

- The BP is an excellent **marketing strategy** for local businesses: being part of the list is a great opportunity for them.

However, the BP is not a tax dodge! All accounts are opened securely, and it is not a money laundering opportunity. Furthermore, the BP is not part of the LETS scheme. There are some continuities with the local currency, but the BP is tied to sterling and it completes sterling. It is also not a profit-making venture for the organisers. Only 4 persons are paid, all volunteers receive no salaries in compensation. The team designed all technologies and notes through funds they raised themselves and applied for. And finally, though it is supported by the Bristol city council, it is not a council project. Figure 3 shows BP's structure and operations model.

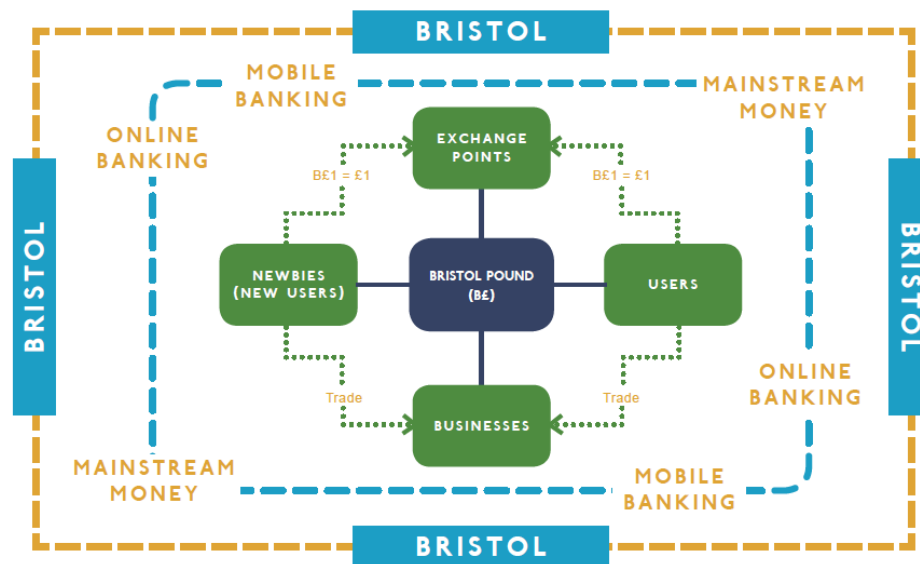


Figure 3. Bristol Pound structure and operations model / source: Calvo and Morales (2014)

3.2. The Bristol Pound's impact

3.2.1. The state of the economy with the Bristol Pound

As seen before, the BP is not a for-profit scheme. It is run in partnership with the BCU. The latter provides financial services to all the people in the community regardless of their incomes. The BP is a way of using money that benefits to everyone, not just the lucky few, because BP sticks to Bristol. Normally, the money that comes to Bristol doesn't usually stays long. When

buying groceries to an international chain, the money leaves Bristol. Just a little portion stays behind, for instance with wages. Nearly any profit a company makes will go into offshore tax savings, big executive pay deals and distant shareholders. Often no or little tax have been paid on these riches, so these big companies hardly contribute to the roads and services they rely to prosper.

With the BP, the money stays and flows around Bristol between people and businesses creating connections, opportunities and jobs. Now, let's picture Bristol as a bucket. The money circulates in it as water, the more it comes, the more there is water in the bucket. When someone gets paid wages or a business makes a sale, it fills the bucket. With normal pounds, the bucket is full of holes. These holes are made by bigger chain companies who want to take the money out of Bristol. Therefore, most of regular pounds leak from the bucket almost immediately. Even if citizens spend regular pounds in local shops, the money still leaves quickly the city. By spending BP, it will fill up the bucket and plug the holes because the money sticks to Bristol every time it is spent, again and again. The benefit of using the BP isn't just a theory, it can affect our life every day.

The BP is part of an international movement to reclaim money. That is why dozens of groups all around the world are working together to develop similar schemes, so they can do things differently. Right there, in Bristol, the movement has already started. The more people get involved and use the BP, the stronger it becomes. Together, the citizens can reclaim money for Bristol. It will help create a fairer local economy by recirculating local money. If citizens shop and buy locally and support local independent businesses, this also means there is less pollution from shipping goods from all over the world. Local businesses will do better than big chain stores by making the economy stronger and doing less damage to the environment. A more localised economy is a stronger, more resilient and greener economy.

For every BP spent, small and medium businesses create more jobs than large businesses. After all, if you had the chance to choose, where would you rather work: an amazon warehouse or a local book shop? The BP tries to be a money for everyone. It is working especially hard in parts of the city where people don't normally have access to locally grown fresh food. With the emergence of smaller local businesses, the BP movement could help reduce inequalities. For instance, in small to medium businesses, compared to big international chain stores, managers don't have 3, 4 or 5 hundred times the salary of the lowest paid person in their firm.

3.2.2. Individuals' benefits and impacts

Since joining the BP, over a quarter of members who took part of the impact survey 2020 have spent more money on local businesses (Bristol Pound, 2020). They predict they will be spending the same amount of money in local businesses over the next year, and more than 10% of the participants are planning to increase even more. As a matter of fact, the BP members are more sensible in spending their money locally in local independent shops than the general population. BP members generally spend it on every day and essential items (food, toiletries), social activities (restaurants and pubs), non-essential and occasional items (gifts and clothes), transports, bills (council tax, energy bills) and services (window cleaning, bike service). The team is developing more and more options on where to spend BP.

BP is the perfect opportunity for citizens to take control over Bristol's wealth, having the cards back in their hands. They can judge whether they want big chain of shops to control the money or independent shops that make Bristol unique in its kind. BP is thus a means to take ownership of the future of the money they work hard for. The local currency allows members to make an ethical decision about how they spend it. The money remaining in the city will benefit the local population again and again if it circulates within the area. It is a way of giving back to Bristol and allowing Bristol's entrepreneurial and innovative character to prosper. Members want to be part of a movement where their actions will build a stronger, fairer, greener and more stable economy. They want to be engaged in this and they take their role at heart. Receiving BP and spending it is in line with their values and morals. They want to show their pride in Bristol.

The BP is also a unique experience. Thanks to the local currency, members can discover the city in a totally different eye. Finding new spots to have lunch, buying a muffin at a local bakery, having drinks at local restaurants / pub, the diversity of the independent sector in Bristol is amazing. If a member use BP to pay a service, they feel as they help businesses in getting local suppliers. They show their allegiance to the local businesses. Moreover, the BP is a money to connect to connect with others. It is a conversation starter. People can ask you in what money you are paying because they have never seen these special bank notes before. It, therefore, helps to build connections with owner-shops but also members of the community and residents. Some businesses provide discounts or special offers to BP members. Thanks to their innovative payment systems, members are happy to spend their money conveniently and securely. The BP is a way to create a community where people understand the value of things, not just the price (Bristol Pound, 2020). People use the BP as a kind of accreditation, just like the organic

accreditation. If they are in the city centre and they want to buy a coffee, they will most likely look for the BP sign. Those are the businesses supporting the local currency and generally accepting them.

3.2.3. Traders' benefits and impacts

As individual members joining the BP, traders taking part in the movement want to contribute to a circular, fairer and greener economy. The BP is a win-win situation because not only has it made Bristol supporting micro businesses become more sustainable and resilient but taking the BP in their business means that they are reinvesting in their local economy according to Briley Morgan (founder of the Made in Bristol 2015). For Nigel Dyke, the director of Alec French Architects, business members see the BP as a very strong symbol of the city. It makes them proud to show at the door of their shops the symbol allowing payment in BP (see Appendix 6). And finally, First West of England (bus network in Bristol) first introduce the BP on their buses because they really wanted to support the initiative, the local economy and the local businesses. Customers can use paper BP to pay for their bus journey with the drivers or they can go into the travel shop and pay for their season tickets using the electronic payment systems (Sarah Wallbridge, senior marketing manager).

When joining the local scheme, the BP offers many benefits to business members. The first advantage of joining the BP is that it will give traders visibility. To be part of the list of businesses on the BP app, website, directory (online and printed) is an opportunity for traders to amplify their brand. The list is visible to more than 1500 individuals accounts holders. Moreover, new business members are promoted on the different social media platforms of the local currency. The BP has more than 25k followers in total. Local independent businesses are introduced in a series of posts. It will bring new and loyal customers to their business who will be willing to spend more money in their shops than a big store.

Furthermore, the BP is a trustworthy network of businesses and customers that share the same values. Through events organised by the local currency, traders can discover new partners, suppliers and trusted collaborators. Indeed, being a member can give traders the opportunity to have access to regular networking events and workshops. The community helps business owners in understanding who are the people that really care about the sustainability of local independent businesses. According to Ibi Feher, a professional photographer, she has found

“(...) A wonderful community where entrepreneurs are truly supportive towards each other. At some networking events people are often looking for how to use you, here people have been looking for ways to help each other. (She) came away from both events with new connections and new job offers. More importantly (She) came away with a feeling of belonging and loads of inspiration” (Bristol Pound).

The BP business members receive discounts from other businesses such as Better Business Bristol and Destination. Both businesses offer a 10% reduction off the membership when it is paid in BP. Better Business Bristol is an initiative to help businesses prosper while spreading a positive impact on Bristol and its inhabitants. The initiative can help businesses amplify their brand, find ways to resolve the city’s main issues, and encourage collaboration of traders and people. Destination Bristol will offer traders another source of visibility by featuring them on the VisitBristol.co.uk website which attracts lots of visitors per year (more than 3 million visitors). It can improve traders marketing opportunities and be a new channel to attract new and loyal customers. Lastly, business members of the BP can join FSB (Federation of Small Businesses) for free, saving up to £30. FSB helps smaller businesses and traders to reach their goals. They offer their financial expertise, governance advice, support.

To conclude, the BP can give free point of sale material to let other members know that their business accepts payment in BP (see Appendix 6). If being part of the local scheme is too confusing, the BP team has video training material and professional support on how to use the online banking facilities, the innovation payment systems and how to use the local money. Over 800 businesses in Bristol and its area have joined the local scheme. The Bristol City Council agrees that businesses can pay their business rates, market rents and council tax in BP.

A table in Appendix 7 summarises all BP’s benefits and impacts.

3.3. The future of the Bristol Pound

“We’ve been looking beyond the current Bristol Pound model” - Diana Finch (Bristol Pound Managing Director)

3.3.1. Bristol Pound’s main current challenges

The BP, launched in 2012, retains a greater proportion of Bristol’s money which citizens worked hard for. It can make a great economic boost to the city and its area. It supports diversity,

local independent businesses, people who want to own their own shops, creativity, entrepreneurship. This leads to a strong economy structure, giving a more horizontal aspect to the economy in contrast with vertical traditional economy. However, the importance of supporting local economy, giving people a sense of identity and competing against big nationals, has changed these eight past years. We are now at a different place than we were back then (Cork, 2020). The movement has gone out of breath and lost its inspiring motives. Nowadays, if you asked a business that is supposed to accept the BP, a lot won't be able to answer if they still do because it has been a long time since they have seen the local currency circulating (Cork, 2020). People have maybe lost interest; they have new preoccupations such as the climate change; and they change their habits.

The first regret is that the BP is too concentrated in the city centre. The bubble doesn't go beyond the axis of the Old City, Southville, Bedminster, Ashley, Bishopston and Horfield. Inhabitants of more disadvantaged communities of the city don't benefit that much at all. The BP is less important there because there are fewer independent businesses, so less places to spend the social money (Cork, 2020). The BP appears to be less inclusive. Those having the opportunity to spend the local currency are regulars. They know how to use BP, they are having less difficulties than new, potentials or elderly members. In fact, quite a lot find the scheme a bit hard to grasp (Bristol Pound, 2017). Some members are unsure how to properly make a payment (cash or online), finding the currency not as convenient as it ought to be. Due to technical issues with the online and electronic payment system, it is easier from them to use sterling instead (Bristol Pound, 2017). To sum up, as the registration process and the concept is complex for some, the BP needs to get more users involved (Calvo and Morales, 2014).

Lastly, global digitalisation has taken over payment systems. BP members use less and less banknotes, instead they prefer to use the app or their credit card (Bristol Pound, 2017). Today's society is heading towards a cashless economic system, changing the way we use money. With a total of 90% transactions done by cards, it is tricky to pay in BP (Cork, 2020). Cash is becoming hard for individuals to get and complex for businesses to process (Bristol Pound, 2020). Times have changed, consumers are shifting their habits and technology has speeded up payments. Indeed, GooglePay, ApplePay, and many other phone apps allow users to pay securely and quickly. It is now time to localise digital money due to increasing numbers of transactions on these innovative platforms (Bristol Pound, 2020). As for the traditional way to spend money in big chain stores, those apps leak a great amount of money in transaction fees away from the city.

To conclude, the future of the BP local currency scheme is uncertain. Individuals but also businesses feel as they have a lack of influence on the way the economy works (Bristol Pound, 2020). With only one academic study done by now, the outcomes are not as positive as it wishes it to be. The BP has been shown to be an ineffective tool for localisation (Marshall and O’Neill, 2018). It doesn’t seem to influence the businesses to buy local supplies.

3.3.2. Bristol Pound’s vision for the future

If the BP wants to change the local economy, they will have to change. Times have changed, interests have changed, people have changed, and even the way of using money has changed. As would the Managing Director of BP (Finch, 2020) say

“We’ve been looking beyond the current Bristol Pound model, which was developed 10 years ago in a very different time - a time before contactless, before ApplePay, before crypto, and before the climate emergency had been recognised so widely. We’ve been thinking about what we would do if we started from scratch now. The answer is something quite different. Our vision is still aligned with the original aims of the Bristol Pound - to create a greener, fairer, stronger local economy – but we are designing a new solution. Bristol Pay.”

The Bristol Pay, like GooglePlay and ApplePay, would be an e-wallet payment platform. Available for all inhabitants and businesses, the Bristol Pay would empower those excluded and would give digital money for everyone. The project is bigger than the original BP. It creates a completely different way for citizens to exchange financially (Bristol Post, 2020). The Bristol Pay would include BP and a token scheme (Finch, 2020). Tokens would reward members for changes they make. It would help them to reach their environmental and societal goals. For instance, by adopting behaviours that would help tackle the 2030 zero carbon target, users win tokens. With the participation of anchor institutions, they would each have their reward system (i.e. Bristol Water would reward citizens saving water with tokens). Those tokens would generate discounts in the aftermath. Therefore, Bristol Pay would push people to adopt environmentally friendly behaviours and support the local economy. The new project includes LETS and Time banking aspects (Bristol Pound, 2020). However, many of these CCS fail to continue because of the amount of administrative costs. According to Diana Finch (Finch, 2020), the BP operating with a shared infrastructure and a strong governance, it is unlikely that these sorts of CCS would fail.

Furthermore, the BP team has big ambitions. If they want to have a real global economic impact, not only Bristol has to change but also all local economies (Bristol Pound, 2020). The Bristol Pay will be designed in a way to make it easy to implement in different cities across the world. Indeed, economic issues in Bristol are also found in many cities. Therefore, the new platform would be relevant and effective to many. Only one legal entity per local implementation, following B-Corp principles, would manage the platform and represent the body regulator for financial transactions.

Finally, transaction data will be used for good instead of commercial / economic purposes as for GooglePay or ApplePay. Bristol Pay wants to dissociate itself from unsustainable consumerism. Therefore, by anonymised data, it will contribute to understanding the local economy and behaviour patterns, and thus building a plan for the future. Figure 4 shows the future mindset of the BP.



Figure 4. Bristol Pound’s future visions / source : Bristol Pound (2020)

4. Teaching notes

4.1. Synopsis and case overview

The BP is a local currency scheme for the city of Bristol. It was designed and launched in 2012, with the primary aim of boosting trades and spending with local and independent businesses. It encourages citizens to look at ways of spending that money for the good of the local economy. The money circulates within the city instead of wealth leaving immediately through distant supply chains and head offices miles away. The money stays in Bristol and benefit more businesses and inhabitants of Bristol. BP is the largest local currency in the UK. The case study follows the structure and the operations model of the scheme. It helps to understand the purpose of the local money and how it actually works. Individual members and trade members are the first to benefit from the alternative money. Moreover, the BP is going through some changes due to highly important challenges, determining its uncertain future.

4.2. Target group

The purpose of this case study relies on its in-class discussion and application. It serves as a teaching method that will allow class debate and discussions in management-related Undergraduate and Master's level students. This case study could be appropriate to courses such as Business Ethics; Strategy and Entrepreneurship; Strategic Management or other lectures related to sustainable development and innovation.

4.3. Learning objectives

After this session, students will have a first introduction to innovative solutions developed in the purpose for sustainability. The case study of the BP, one of the most successful local currency, is a real-life example that will help students go from theory to practice. Having studied the case, students should be able to identify the following:

- The different forms of CCS and their roles
- The role and impact of a local currency in shaping a greener, fairer and stronger economy.
- The necessary components of sustainability
- The necessary components of social capital

4.4. Assignment questions

The following questions are intended to deepen student's knowledge about the implementation of an alternative monetary system, its governance and management. The teaching questions are designed to help the class to apply theoretical concepts presented in the literature review to the present case. It is important that students develop their sense of judgement and criticism on how a utopic concept works in reality. These questions were designed to open their minds and opinions on the utility and efficiency of innovative monetary systems, whilst covering all the learning objectives. Thanks to their managerial and analytical skills, students should be able to come up with constructive answers to the research problem, divided in the following teaching questions:

1. To what extent has the Bristol Pound a sustainable socio-economic and environmental impact on the local economy?
2. To what extent is the Bristol Pound empowering social capital?

4.5. Guidelines for the teacher

This section is dedicated for the teacher so that he/she can structure his/her lecture and class discussion. The teacher ought to upload the case study on the academic platform of students, one week prior to the session. In one week, students have time to read the case study, to reflect on the subject and to do some additional researches if needed.

The teacher will find below the study plan of the 90-minute session:

1 st step of the lecture	Introduce the session's topic + Briefly summarise the case study of the Bristol Pound	~ 10 minutes
2 nd step of the session	Go through the main subjects of the literature review – CCS / Sustainability / Social capital. The teacher may test his students' knowledge on those different subjects by asking them questions	~ 15 minutes
3 rd step of the session	Let the students discuss the two assignments questions, guide them and help them build constructive answers	~ 60 minutes
4 th step of the session	Wrap up of the class discussion	~ 5 minutes

4.6. Class discussion

4.6.1. To what extent has the Bristol Pound a sustainable socio-economic and environmental impact on the local economy?

For the first assignment question, not more than 30 minutes are needed to complete it. The teacher should advise its students to have a closer look at the literature review on the role of CCS, what are they used for, but also the three components of sustainability. It is important that students know the difference between economic, social and environmental sustainability.

Students should be able to dissociate the key findings in the case study and relate them to sustainability's dimensions. When having in mind the definition of sustainable development, student will be able to identify the main characteristics that make the BP a tool for sustainability.

4.6.1.1. *Economic impact*

The BP has had an economic impact on the community in two distinctive ways. Firstly, thanks to the qualitative details given in the case study, students will be able to strongly support the argument that the BP does support the local economy. The local currency creates a parallel and

shorter circuit of consumption where money earned by hard working citizens is reinvested by individual and business members. The BP team has developed many local options in where to spend the money, therefore, users increase their spending in local shops and independent businesses. It is a means of sustaining the diverse, creative but also entrepreneurial spirit of the city. In addition, by keeping the money local, it prevents the leak of wealth. As a matter of fact, the BP makes the local currency stay way longer than the traditional legal tender. It pushes users to prioritise businesses that are not attached to a big national corporate. Instead of leaving Bristol immediately, the money circulates in a circle of users, happy to give back to the city. And finally, the BP provides great business advantages, beneficiating to the local economy. It gives much more visibility to small ethical businesses than it usually would. Thanks to point of sale material (BP symbol on the front store), online media advertising, the BP introduces business owners to new and very loyal consumers. It is an excellent marketing move to be part of the list of businesses accepting the local scheme. Users give it an accreditation and they are willing to spend money on things that matter. It also builds business network connections and hardens the trust between suppliers, blooming cooperation between them. Businesses benefit from discounts on advice and strategy management, but they also give discounts to the local currency members.

4.6.1.2. Social impact

On the other hand, students will be able to put forward the aspects that proves that the BP has had a social impact on the community. Definitely, it has benefited to the well-being of Bristol community. This money was designed for the best interest of the public and users. Based on a voluntary principle, anyone can get BP paper money and any business can accept it. It thus allows the participation of all those that want to get involved. It encourages civic engagement, ethical decisions. It also gives a feeling of power by taking back the control of the monetary system locally. Users are happy to help and feel as they are helping others. It boosts their self-esteem to meet new people that share the same ethical values as them. They are confident in discovering new places in the city and they build strong and trustworthy relationships. It is as if users finally understood the value of things.

However, students need to understand the challenges that CCS and particularly BP are facing. They need to go beyond what is said. The economic and social impacts of the BP are limited. There are less users and less businesses involved. The BP is not as inclusive as it wants to be.

BP may be seen as a utopic vision of money that isn't backed by strong academic figures. If the BP doesn't evolve into a scheme that fit today's society and its way of spending money, it will eventually struggle to survive.

4.6.1.3. Environmental impact

And to conclude, the BP hasn't had an environmentally sustainable impact on the community. No information has stated the role of the BP on an environmental point of view. As seen in the literature review, very little information has been presented regarding the impact of CCS on the environment. However, we can assume that while privileging local consumption, less imported products would be needed, reducing the ecological footprint of citizens.

Figure 5 presents the sustainable socio-economic and environmental impact of the BP.

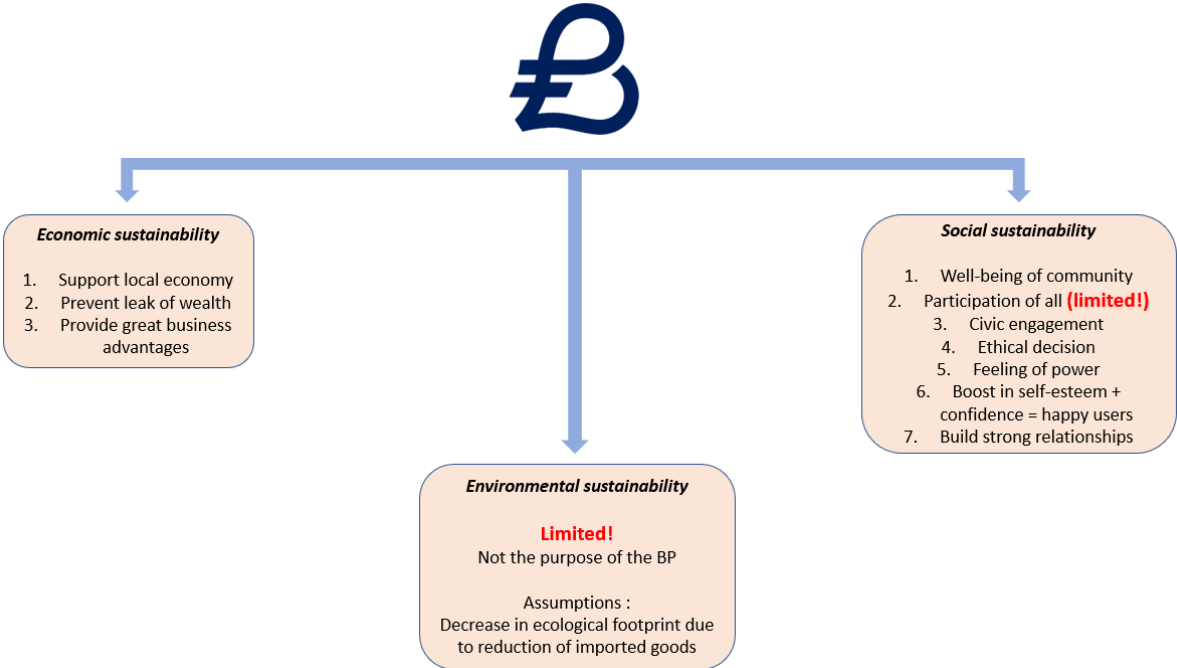


Figure 5. Bristol Pound's sustainable impact on the community

4.6.2. To what extent is the Bristol Pound empowering social capital?

For the second assignment question, not more than 30 minutes are needed to complete it, just like the first question. As an introduction, the teacher should clarify what social capital is based

on the literature review. He should go then explain thoroughly all the dimensions of social capital. It is best if students are split in pairs so that they can discuss it first and then give their approach for the analysis in the class discussion. It will enable them to debate whether all the components are relevant are not in the BP study case.

4.6.2.1. *Structural dimension*

Students should be able to identify the network ties and configuration of the BP. As a matter of fact, the BP is designed to be in a central position in the network creation of its members. It is a currency, created to boost trades among a community. Therefore, the BP has enhanced client members relationships and encouraged new local independent businesses to thrive. By creating new contacts, either between individual members or businesses and suppliers, the BP maintains strong collaboration ties with its users. When people who are not usually connected because they are not from the same social background or do not work in the same sector for instance, they tend to create a network in which they will gain information, knowledge and other benefits from the network diversity.

4.6.2.2. *Relational dimension*

Students should understand the relational dimension of the BP scheme. The latter has indeed high trust and cooperation among its main benefits and values. The BP has managed to connect many users together, under a same movement. The main intention of the local currency is to support the community, therefore trust and cooperation are at high level. Collective trust is also emphasized. With business discounts giving access to help and advice but also meeting people who are ready to genuinely help you, members of the local currency can rely more on one another than usually. Furthermore, to encourage trust and cooperation, collective norms are to be respected. Individual and business users should apply the scheme rules for having access and for using the BP money. When following these steps and rules, members benefit of trusted reciprocity that will push even further cooperation and support. Citizens join the BP movement because they share the same values of the members: they want to live in a greener, fairer and stronger economy, where trust and goodwill reign. Through their membership, they can project themselves and their morals in the organisation. However, in 2020, citizens or traders identify less to the local currency scheme standards and values, because people have changed

throughout the years. They have changed their habits, their interests, their standards and now they have other priorities. When people change so does their identification to a group.

Finally, students should comprehend that the obligation and expectation component of social capital’s relational dimension is not expressed in the current BP design. As a matter of fact, users don’t have any duty towards one another. However, in the future design of the BP, it will be interesting to see whether this component will be introduced thanks to the token system.

4.6.2.3. Cognitive dimension

Based on the information given, students should be able to underline the vocabulary used in this local currency system. The teacher during the class discussion can write on the board all the words related to the BP. It will engage the students in giving their insights and bring more interactions to the session. Attention should be brought on how the vocabulary used is in fact not new but quite simple words related to everyday life. It makes the scheme easy for new participants to understand, use and interact with other members. Figure 6 shows vocabulary examples.


Examples of shared vocabulary and visual codes		
Bristol pound	Cash points	
Local currency / local money	Paper BP / bank notes / paper notes	
Sustainability	Digital BP	
Local economy	Text-2-Pay	
Local business	Bristol app	
Independent	Bristol Pay	
Impact	Payroll partner	
Volunteer system	Online directory	
Control	Expiry date	

Figure 6. Shared vocabulary and visual codes examples

To conclude, students should identify the shared narrative of the BP organisation. The first message that the scheme wants to share is that the current financial system is obsolete. Big banks have mainly brought them austerity and deeper inequalities since the 2008 crisis. That is why it is high time that banking and money work together for the better of communities. It is

time to take back the control for the financial circuit. Their perception is a powerful call for action. Figure 7 shows the social capital components from the BP.

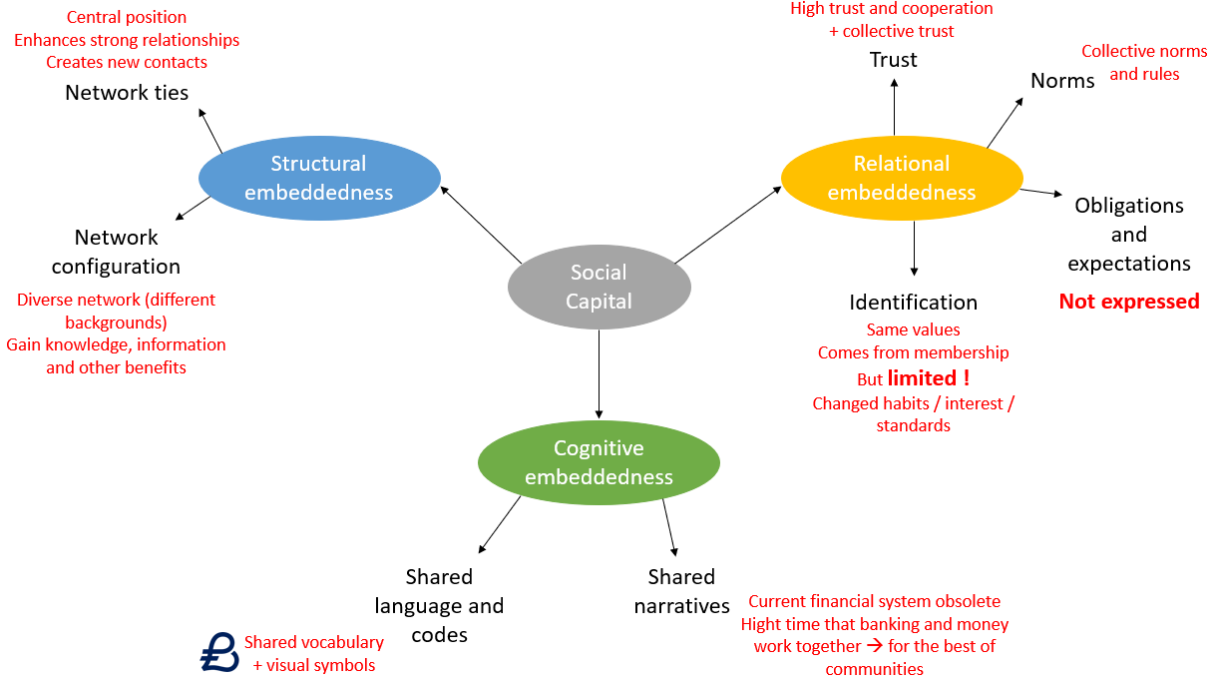


Figure 7. Social capital components from the Bristol Pound

4.7. Class conclusion and Wrap up

In the last 5 minutes, the teacher should recall the main points of the session. With the sustainability impact analysis and the social capital analysis of the BP, they have demonstrated the strengths and weaknesses of a CCS structure and ambition. Students will have learned about innovative projects related to sustainable development, sparking their interest in entrepreneurship and strategic management.

5. Conclusions

The objective of this thesis was to understand how a CCS such as the BP could impact a community and to comprehend the limits of their ambitions. Following the teaching case approach, the thesis starts with a literature review on CCS, sustainability and social capital. The author then presents the case of local currency BP, and the collection of qualitative secondary data to give a better understanding of the BP and the benefits obtained by members.

After taking a close look at the findings, it can be concluded that the BP has transformed its community for the better but to an extent. The BP aims to make a difference and to settle for a more stable and sustainable financial inner system. They have succeeded in having economic and social sustainable outcomes. As a matter of fact, by supporting the local economy, restraining the money from leaving and providing business opportunities, the local currency has benefited to the well-being of most members. On the other hand, the BP has developed social capital in its community through its network ties and structure. It helped to forge a trustworthy network whereby following collective norms, users share same values, identify to the group and all believe in the same message: it is time to change.

However, the impacts found are limited. If the scheme is finding it hard to involve users and businesses, it will have consequences on final outcomes. In other words, it will affect the socio-economic sustainability. The BP business model relies too much on their members' involvement. Since its launch in 2012, the team has only made one quantitative research regarding their impact on the community. More quantitative researches will help in their communication and will show proof of their extent. People won't be as reluctant to join the movement. It will give them more legitimacy towards the public and institutions. Moreover, as seen in BP's future vision, CCS need to adapt to today's society. It must evolve with its users. BP has made a choice to be more digital and to participate in a cashless society, but their token system may complexify the scheme, losing potential users. They ought to refocus their needs and objectives to be able to move forwards. Finally, to be accessible to all, the BP needs to involve and axe their communication outside of the city centre bubble. CCS is about including people who identify to their values, it is a waste of potential change to have a narrow circuit.

This study is relevant firstly by helping to understand the internal mechanisms of a CCS. Even though this study is based on only one CCS, it allows to understand its challenges, its goals, the

intelligence involved in its creation but also the strategic choices regarding its operational model and means of communication. It can assist managers or board of directors of CCS to guide their decisions towards more coherent choices. The BP is a pertinent example in the fact that its launch could be called a success, but it lacked a long-term vision aligned with society and user's evolution. Secondly, managers will retain BP's best practices but will learn from its mistakes and/or blindness. Indeed, being the most successful local currency is the UK, the BP has a lot to offer to other schemes, but managers should be able to understand that to survive and to have a meaningful impact, future CCS need to keep evolving.

6. Appendixes

Appendix 1. Summary table CCS

	Mutual Exchange Currency	Service Credits Currency	Local Currency	Barter Market Currency
Examples	LETS	Time Dollars / UK Time Banks	Community Banks (Brazil) / Ithaca Hours (USA)	Argentinean Redes de Trueques
Mechanisms	Rely on debits and credits created during exchange Mutual credit	Mutual credit Time credit Time-based money	Paper money slips or electronic money in a defined area	Money created in a defined place and at a certain time
Convertibility	Not convertible	Not convertible	Sometimes convertible	-
Purposes	Economic and social	Social	Economic and social	Economic
Goals	Import substitution Interest-free credit Community spirit Social capital Social inclusion	Social capital Social cohesion Social inclusion Civic engagement	Local economy boost Local businesses support Employment Alleviate poverty Develop communities Community and economy resilience	Facilitates exchanges and trades Meet economic needs of members

Appendix 2. Summary table of the Bristol Pound organization

Context	Where	Bristol – United Kingdom
	Population	463 400
	Ethnicities	Mainly white British
	Goals	Boost the local economy and to keep the wealth in the city
Profile	Year creation	2012
	Registration	Not-for-profit Community Interest Company

	Influenced by	The Brixton Pound (UK)
	Founders	Bristol City Council Bristol Credit Union
Operations	Management	Board of directors (local businesses and founders) Paid staff (part-time basis) and volunteers Cash points Distributors
	Governance	Democratic
	Meetings	~ 1 meeting / month
	Currency exchange	1 BP = £1
	Money availability	1 / 5 / 10 / 20 BP (paper notes)
	Circulation	Over 140 000 BP
	Type	Paper-based currency Text-2-Pay (will be deleted eventually) Application
	Procedure	Members need to open an account with the Bristol Credit Union. For every sterling they put on their account, they will be credited 1 BP. Users can then do online payments, withdraw cash, pay with the app or pay by mobile phone text.
	Legality	The BP is run as a partnership between the BPCIC and the BCU. It is a not-for-profit company interest company. It has physical paper currency, a mobile phone payment system and an application. The BCU manages all the electronic accounts.
	Security	Silver hologram design / gold foil strip with serial numbers embedded / other features making it impossible to replicate.
Impact	Outputs	+700 local businesses received BP +450 signed up to online accounts
	Local authority participation level	High
	Political tendency	no political party / political movement associated
	Challenges	Get more users involved Digital money Follow current trends

Appendix 3. Bristol Pound's Rules

Bristol Pound - Scheme Rules for Individual Members and Trader Members.

1. These Rules are issued by Bristol Pound CIC ('the Company') which administers the Bristol Pound ('the Scheme'). These Rules govern the administration of the Scheme for members of the public who join the scheme ('Individual Members') and for businesses who join the Scheme ('Trader Members'), together 'Scheme Members'. They are subject to amendment without prior notice by the Company. Scheme Members will be notified by email when these Rules are amended and the amended Rules shall be made available on the Scheme website.

The purpose of the Scheme is to strengthen the local economy through the provision of an alternative, locally controlled means of exchange. The Company is a not-for-profit entity. Any net profits generated will be re-invested in further developments of the local Bristol economy or other local currency initiatives. Members will be consulted about any such distribution before it takes place.

2. The Scheme consists of two separate but related elements; a printed-paper form of the currency (the 'Paper Bristol Pound') and a digital currency (the 'Bristol Pound Digital Currency').
3. By accepting and/or spending either the Paper Bristol Pounds or the Bristol Pound Digital Currency for goods and services, the Scheme Members expressly agree to be bound by these Rules.
4. The Paper Bristol Pounds and the Bristol Pound Digital Currency are not legal tender. This means that people are not obliged to receive them in payment unless they specifically agree to do so. Trader Members have agreed to receive them in payment for goods and services up to an agreed limit.
5. Trader Members' addresses will be displayed at www.bristolpound.org (the 'Scheme Website').

Paper Bristol Pounds

Paper Bristol Pounds have been made as safe and secure as is reasonably practicable. To this end:

- a. there are a number of security devices incorporated into the design.
- b. each Paper Bristol Pound is backed by a sterling pound (except where Paper Bristol Pounds have been sold outside the area to collectors as souvenirs).

Where Paper Bristol Pounds have been sold as souvenirs to collectors, those collectors or anyone to whom they subsequently pass on, sell or otherwise dispose of the Paper Bristol Pounds acknowledge and agree that they have no right to exchange the Paper Bristol Pounds in accordance with clauses 8 and 13 nor will they present the Paper Bristol Pounds in payment for goods or services.

6. The Paper Bristol Pound can be obtained from Cash Points across the city. These Cash Points will be advertised on the Scheme's website.

7. Trader Members are obliged to, and reserve the right to, refuse any Paper Bristol Pound that they have reason to suspect is counterfeit or which is damaged, defaced, incomplete or illegible. Details of simple checks that can be made to guard against counterfeiting are available on the Scheme Website.
8. The Company reserves the right to refuse any Paper Bristol Pound that they have reason to suspect is counterfeit or which is damaged, defaced, incomplete or illegible when it is presented by Trader Members for reimbursement credit to their accounts at Cash Points.
9. The Paper Bristol Pound is not legal tender and is legally considered to be a voucher.
10. If the Scheme should close, then Bristol Pound CIC will notify Scheme Members on the Scheme Website and holders of properly authenticated and issued Paper Bristol Pounds will be reimbursed with sterling at face value by presenting the Paper Bristol Pounds for reimbursement within three months following closure of the Scheme. This right does not apply to collectors who have purchased Paper Bristol Pounds (see clause 5b).
11. Other than under the circumstances outlined in clause 10 above, the Paper Bristol Pound cannot be exchanged back into sterling by Individual Members, nor can it be credited to an Individual Member's Bristol Pound Digital Currency account.
12. The Paper Bristol Pound can be presented for reimbursement by Trader Members. Trader Members can do this by taking the Paper Bristol Pound to a Cash Point, where it can be credited to their Bristol Pound Digital Currency account. It can then be converted into sterling as set out in their Bristol Pound Account Terms and Conditions and described in the User Guide.
13. The current issue of the Paper Bristol Pound will be valid until September 30th 2021, or an earlier date if decided by the Scheme's administrators (the 'Retirement Date'). In either case:
 - a. Three full months' notice will be given of the Retirement Date by email to members and through the Scheme website. The replacement issue of the Paper Bristol Pound will be available for at least three months before the Retirement Date. The current issue of the Paper Bristol Pound will be exchangeable for the replacement issue of the Paper Bristol Pound at the Cash Points. The current issue of the Paper Bristol Pound will not be accepted by Trader Members in exchange for goods and services after the Retirement Date.
 - b. After the Retirement Date the current issue of the Paper Bristol Pound will continue to be exchangeable for the replacement issue of the Paper Bristol Pound at Cash Points for a further three months. (the 'Final Retirement Date').
 - c. After the Final Retirement Date the current issue of the Paper Bristol Pound will no longer be valid for acceptance.
 - d. The Retirement Date and the Final Retirement Date will be publicised on the Scheme Website. An email confirming the dates will also be sent to each Member of the Scheme to the last email address notified to the Scheme administrators.
 - e. This process may be repeated for future issues of the Paper Bristol Pound.
 - f. This right to exchange does not apply to collectors who have purchased Paper Bristol Pounds (see clause 5b).

The Bristol Pound Digital Currency

14. The Bristol Pound Digital Currency can only be used by opening and operating a Bristol Pound account with Bristol Credit Union ("BCU"). BCU are an authorised and regulated deposit taker. They are authorised and regulated by the Financial Services Authority, firm reference 213583. BCU are solely responsible for all administration of the Bristol Pound Digital Currency accounts.
15. All Scheme Members will need to fulfil the requirements for membership of BCU, which means that:
 - a. Individual Members need to reside within the membership area defined as the former County of Avon.
 - b. Trader Members need to have a place of business in the membership area, be a housing provider with tenants in the membership area, or supply goods and services to the value of £1000 or more per annum to individuals or organisations in the membership area.

In addition Trader Members need to satisfy Bristol Pound CIC that they are:

- a. Providing a useful service to local people
- b. Providing local jobs
- c. Enhancing local identity
- d. Recognising the importance of a robust local economy
- e. Largely owned by people who live in the community

Most decisions on membership of the Scheme will be made within 24 hours. Membership applications that raise ethical, environmental or other concerns will be referred to the Directors of Bristol Pound CIC. Their decision will be final.

16. Terms and Conditions set out by BCU apply to all Bristol Pound accounts. Scheme Members must read the Terms and Conditions carefully and abide by them, as a condition of continued membership of the Scheme.
17. In order to use the Bristol Pound Digital Currency an individual or business must:
 - a. become a member of BCU in accordance with their Rules and open a Membership Share Account and a Bristol Pound account with them; and
 - b. become an Individual or Trader Member of the Scheme by agreeing to abide by these Rules
18. Payments in the Bristol Pound Digital Currency in order to purchase goods and services can be made as set out in the Bristol Pound account Terms and Conditions, and described in the User Guide available from BCU or on the Scheme Website. Transaction and other charges may apply as set out in the Terms and Conditions.
19. With reasonable cause (to be decided in their absolute discretion by the Company and/or BCU) any Scheme Member may have their Scheme Membership suspended or closed. In that event their Bristol Pound account may also be suspended or closed.

Other Rules

20. Trader Members agree to:
 - a. prominently display notification that they are Trader Members at their place of business and on their website,
 - b. encourage usage of the Scheme and (where appropriate) offer Paper Bristol Pounds in change in transactions,
 - c. train all staff in procedures for taking Bristol Pound digital payments and in handling processes for paper Bristol Pounds.
 - d. accept the Paper Bristol Pound and the Bristol Pound Digital Currency in exchange for goods and services at the rate of one Paper Bristol Pound to one pound sterling,
 - e. notify the Company of any changes to their address or contact details to enable the website and printed directory details to be updated.
and
 - f. account for VAT and taxes as appropriate as if all transactions were made in sterling.
21. A membership charge may be levied by the Company ('Trader Membership Charge') in respect of a Trader Member's contribution to the overheads of the Scheme and marketing and promotion services. This charge will be notified by email to Trader Members who will receive 28 days notice.
22. All Scheme Members consent to the Company contacting them by phone, email, post and text messages concerning the usage of the Bristol Pound. Members can opt out from receiving marketing communication by emailing info@bristolpound.org.
23. All pictures, photographs and any other images (either on the Paper Bristol Pound, the Scheme Website or any other publicity material) howsoever created by the Company or other connected entities in connection with the Scheme, are fully protected by law. They are the property of the Company and cannot be used without written permission of the Company.
24. Although the Scheme will be administered in good faith by the Company, the directors of the Company and its employees, and through its partnership with Bristol Credit Union, neither the Company itself, nor any of those parties can accept responsibility for any disputes arising out of the Scheme between Scheme Members. In addition, acceptance of a business or individual as a member for the purposes of the Scheme does not represent an endorsement of that business or individual, or their goods or services by the Company or BCU.
25. The Company can amend these rules from time to time at their discretion and all members agree that, in consideration of being part of the Scheme and availing themselves of the benefits thereof, they shall be governed by such amendments. In the event of any such amendments all Scheme Members will be notified by email when these rules are amended and the amended rules shall be made available on the Scheme website. The new version will govern the Scheme and its relationship with all Scheme Members immediately upon its posting on the Scheme's website.

The Directors

The Bristol Pound CIC

16/10/2018

Appendix 4. Bristol Pound money slips



Source: Bristol Pound <https://bristolpound.org/> (25/05/2020)

Appendix 5. Security features of the Bristol Pound banknotes



The new paper notes include these security features

- A Gold foil strip
- B Expiry date
- C Printed serial number
- D Fluorescent Ink Bright strip
- E Etched Gold Foil Image of £B
- F Hologram

Source: Paper Bristol Pounds Second Edition 2018 – Security Guide
<https://bristolpound.org/wp-content/uploads/2018-paper-pounds-security-guide.pdf>
 (25/05/2020)

Appendix 6. Material for business members



Source: “Bristol Pound is not making us produce local products, say academics” (Bristol Post, 2017) <https://www.bristolpost.co.uk/news/bristol-news/bristol-pound-not-making-buy-900512>
 (25/05/2020)

Appendix 7. Bristol Pound’s benefits and impacts

Bristol Pound benefits and impacts		
Economy	Individual	Traders
<ul style="list-style-type: none"> - Money (BP) stays longer in the city between people and businesses - Creates connections, opportunities and jobs - Reclaims money - Helps create a fairer, stronger, greener local economy → resilient - Support local independent businesses - Could help inequalities 	<ul style="list-style-type: none"> - Happy members - Feeling useful to the city and businesses - Civic engagement - Form new connections - Spend more in local shops → more sensible on where to spend - Have many options on how and where to spend BP 	<ul style="list-style-type: none"> - Win-win situation - Support their business - Reinvest in local economy - Strong symbol - Gain visibility - Opportunity to amplify brand - Free promotion on social media - Trustworthy network

	<ul style="list-style-type: none"> - Take back control on where the money is going - Ethical decision making - Giving back to Bristol - Aligned with their values - Unique experience - Discover the city / new shops - BP = accreditation - Receive discounts 	<ul style="list-style-type: none"> - Networking events + workshops - Form new connections with businesses and suppliers - Supportive community - New and loyal customers - Receive discounts - Video training + visual material - Can pay business rates / market rents / council tax in BP
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7. References

- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of management review*, 27(1), 17-40.
- Antoci, A., Sacco, P. L., & Vanin, P. (2005). On the possible conflict between economic growth and social development (pp. 150-73). Cambridge: Cambridge University Press.
- Akerlof, G. A. (1980). A theory of social custom, of which unemployment may be one consequence. *The Quarterly Journal of Economics*, 94(4), 749.
- Akerlof, G. A. (2007). The missing motivation in macroeconomics. *American Economic Review*, 97(1), 5–36.
- Arrow, K. J. (1974). *The limits of organization*. WW Norton & Company.
- Banfield, E. (1967). *The moral basis of a backward society*. New York: Free Press.
- Bernauer, T. (2013). Climate change politics. *Annual Review of Political Science*, 16, 421–448.
- Bicchieri, C. (2006). *The grammar of society*. New York: Cambridge University Press
- Birch, D., & Liesch, P. (1997). Moneyless exchange: Attitudes of participants in Australian community barter systems. *International Journal of Nonprofit and Voluntary Sector Marketing*, 2(3), 240-251.
- Blanc, J. (2011). Classifying "CCs": Community, complementary and local currencies' types and generations (No. halshs-00583587).
- Blanc, J. (2017). Making sense of the plurality of money: A Polanyian attempt. In Presented at 29th SASE annual meeting, Lyon, France, June 2017.
- Botsman, R., & Rogers, R. (2010). *What's mine is yours. The rise of collaborative consumption*.
- Bourdieu, P. (1986). The forms of capital. Richardson JG, editor. *Handbook for Theory*.
- Boyle, D., & Simms, A. (2009). *The new economics: a bigger picture*. Earthscan.
- Bristol Pound. <https://bristolpound.org/> (Accessed on the 25/05/2020).
- Bristol Pound. (2017). *Survey Results, key findings*. <https://drive.google.com/file/d/1ztE82Zqmwack5QTXDI5Ip96YXmLtk3U/view>
- Bristol Pound. (2014, 23 September). *Why use the Bristol Pound?* [Video]. Youtube. <https://www.youtube.com/watch?v=guRoWTYfxMs> (Accessed on the 25/05/2020).
- Bristol Pound. (2018, 26 January). *Cool Currency – Bristol Pound* [Video]. Youtube. <https://www.youtube.com/watch?v=tHliF-Dhbw> (Accessed on the 25/05/2020).

- Bristol2015. (2015, 24 March). *Bristol Pound and the green economy* [Video]. Youtube. <https://www.youtube.com/watch?v=q8aAT7afzbc&list=WL&index=33&t=0s> (Accessed on the 25/05/2020).
- Burt Ronald, S. (1992). *Structural holes: the social structure of competition*. Boston, MA.
- Caldwell, C. (2000). Why do people join local exchange trading systems. *International Journal of Community Currency Research*, 4(1), 1-6.
- Calvo, S., & Morales, A. (2014). *Exploring complementary currencies in Europe: a comparative study of local initiatives in Spain and the United Kingdom*. London: Living in Minca.
- Child, J., & Rodrigues, S. (1996). The role of social identity in the international transfer of knowledge through joint ventures. *The politics of management knowledge*, 46, 68.
- Choi, S., & Ng, A. (2011). Environmental and economic dimensions of sustainability and price effects on consumer responses. *Journal of business ethics*, 104(2), 269-282.
- Chung, L. H., & Gibbons, P. T. (1997). Corporate entrepreneurship: The roles of ideology and social capital. *Group & Organization Management*, 22(1), 10-30.
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. *Advances in Experimental Social Psychology*, 24, 201–234.
- Cicourel, A. V. (1973). *Cognitive sociology* Penguin Books. Harmondsworth, UK.
- Clark, B. R. (1972). The organizational saga in higher education. *Administrative science quarterly*, 178-184.
- Collom, E., Lasker, J.N., Kyriacou, C. (2012). *Equal Time, Equal Value*. Ashgate, Farnham
- Colacelli, M., & Blackburn, D. J. (2009). Secondary currency: An empirical analysis. *Journal of Monetary Economics*, 56(3), 295-308.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, 94, S95-S120.
- Coleman, J. (1990). *The Foundations of Social Theory*, Cambridge.
- Coleman, J. S. (1994). *Foundations of social theory*. Harvard university press.
- Conill, J., Castells, M., Cardenas, A., & Servon, L. (2012). Beyond the crisis: The emergence of alternative economic practices. *Aftermath: The cultures of the economic crisis*, 210-250.
- Cork, T. (2020, March 1). What ever happened to the Bristol Pound? *Bristol Live*. <https://www.bristolpost.co.uk/news/bristol-news/what-ever-happened-bristol-pound-3890628> (Accessed on the 25/05/2020).
- Dale, A., & Onyx, J. (Eds.). (2010). *A dynamic balance: Social capital and sustainable community development*. UBC Press.

- Daly, H. E., & Farley, J. (2011). *Ecological economics: principles and applications*. Island press.
- Dittmer, K. (2013). Local currencies for purposive degrowth? A quality check of some proposals for changing money-as-usual. *Journal of Cleaner Production*, 54, 3-13.
- Douthwaite, R. (2000). *Short circuit: strengthening local economies for security in an unstable world*.
- Elkington, J. (1997). *Cannibals with Forks: the TBL of the 21st Century Business*. Capstone, Oxford.
- Elster, J. (1989). Social norms and economic theory. *Journal of Economic Perspectives*, 3(4), 99–117.
- Fare, M., & Ahmed, P. O. (2017). Complementary currency systems and their ability to support economic and social changes. *Development and Change*, 48(5), 847-872.
- Fare, M., (2011). The SOL: a complementary currency for the social economy and sustainable development. *International Journal of Community Currency Research* 15 D, 57–60
- Fare, M. (2012). Les apports de deux dispositifs de monnaies sociales, le SOL et l'Accorderie, au regard des enjeux du développement local soutenable. *Revue internationale de l'économie sociale: recma*, (324), 53-69.
- Finch, D. (2020, January 31). Guest Blog: Our economy needs to change – Bristol Pound. The Future Economy Network. <https://www.thefutureeconomynetwork.co.uk/blog/2020/1/31/guest-blog-our-economy-needs-to-change-bristol-pound> (Accessed on the 25/05/2020).
- França Filho, G., Silva Junior, J., & Scalfoni, A. (2012). Solidarity finance through community development banks as a strategy for reshaping local economies: Lessons from Banco Palmas. *Revista de Administração da Universidade de São Paulo*, 47(3), 500–515.
- Fraňková, E., Fousek, J., Kala, L., & Labohý, J. (2014). Transaction network analysis for studying Local Exchange Trading Systems (LETS): Research potentials and limitations. *Ecological Economics*, 107, 266-275.
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity* (Vol. 99). New York: Free press.
- Gabbay, S. M., & Zuckerman, E. W. (1998). Social capital and opportunity in corporate R&D: The contingent effect of contact density on mobility expectations. *Social Science Research*, 27(2), 189-217.
- Gao, Z., Li, L., & Lu, L. Y. (2019). Social capital and managers' use of corporate resources. *Journal of Business Ethics*, 1-21.
- Giddens, A. (2013). *The consequences of modernity*. John Wiley & Sons.
- Gómez, G. M., & Wit, J. D. (2015). Contestations and contradictions in the Argentine Redes de Trueque. *Revue de la régulation. Capitalisme, institutions, pouvoirs*, (18).

- Gómez, G. M., & Helmsing, A. H. J. (2008). Selective spatial closure and local economic development: What do we learn from the Argentine local currency systems?. *World Development*, 36(11), 2489-2511.
- Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological theory*, 201-233.
- Greco, T. (2001). *Money: Understanding and creating alternatives to legal tender*. Chelsea Green Publishing.
- Hagens, N. J. (2020). Economics for the future—Beyond the superorganism. *Ecological Economics*, 169, 106520.
- Hahn, T., Preuss, L., Pinkse, J., & Figge, F. (2014). Cognitive frames in corporate sustainability: Managerial sensemaking with paradoxical and business case frames. *Academy of management review*, 39(4), 463-487.
- Hansen, M. T., Podolny, J., & Pfeffer, J. (1999). Social networks in organizations—Capital or liability. *Arbeitspapier*, Harvard Business School.
- Hopkins, R. (2008). *The transition handbook*. Totnes: Green Books.
- IMF, 2019. *World Economic Outlook, October 2019: Global Manufacturing Downturn, Rising Trade Barriers*
- Jackson, T., & Senker, P. (2011). Prosperity without growth: Economics for a finite planet. *Energy & Environment*, 22(7), 1013-1016.
- Jacob, J., Brinkerhoff, M., Jovic, E., & Wheatley, G. (2004). The social and cultural capital of community currency: an Ithaca HOURS case study survey. *International Journal of Community Currency Research*, 8(4), 42-56.
- Joachain, H., & Klopfert, F. (2014). Smarter than metering? Coupling smart meters and complementary currencies to reinforce the motivation of households for energy savings. *Ecological Economics*, 105, 89-96.
- Kennedy, M., Lietaer, B. A., & Rogers, J. (2012). *People money: The promise of regional currencies*. Triarchy Press Limited.
- Knez, M., & Camerer, C. (1994). Creating expectational assets in the laboratory: coordination in 'weakest-link' games. *Strategic Management Journal*, 15(S1), 101-119.
- Kramer, R. M., Brewer, M. B., & Hanna, B. A. (1996). Collective trust and collective action. *Trust in organizations: Frontiers of theory and research*, 357-389.
- Lietaer, B. (2001). The future of money: Towards new wealth, work and a wiser world. *European Business Review*.
- Lietaer, B., & Belgin, S. (2012). *New money for a new world*. Qiterra Press, LLC.
- Lietaer, B. A., Schneider-Arnspenger, C., & Goerner, S. (2012). *Money and sustainability: the missing link*. Triarchy Press.

- Lin, N., & Dumin, M. (1986). Access to occupations through social ties. *Social networks*, 8(4), 365-385.
- Lindbeck, A. (1995). Welfare state disincentives with endogenous habits and norms. *Scandinavian Journal of Economics*, 97(4), 477–494.
- Living in Minca. (2016, September 16). *Fostering local businesses. The Bristol Pound, UK* [Video]. Youtube. <https://www.youtube.com/watch?v=UT0Z1wsRKis> (Accessed on the 25/05/2020).
- Longoni, A., & Cagliano, R. (2018). Sustainable innovativeness and the triple bottom line: The role of organizational time perspective. *Journal of Business Ethics*, 151(4), 1097-1120.
- Marshall, A. P., & O'Neill, D. W. (2018). The Bristol Pound: A tool for localisation?. *Ecological Economics*, 146, 273-281.
- Martignoni, J. (2012). A new approach to a typology of complementary currencies. *International Journal of Community Currency Research*, 16(A), 1-17.
- Mellor, M. (2010). *The Future of Money*. Pluto Press, London
- Melo, J., & Braz, J. (2013). *Banco Palmas–Resistindo e Inovando*. A9 Editora.
- Merton, R. K., & Merton, R. C. (1968). *Social theory and social structure*. Simon and Schuster.
- Meyer, C., & Hudon, M. (2019). Money and the commons: An investigation of complementary currencies and their ethical implications. *Journal of Business Ethics*, 160(1), 277-292.
- Michel, A., & Hudon, M. (2015). Community currencies and sustainable development: A systematic review. *Ecological economics*, 116, 160-171.
- Mishra, A. K. (1996). Organizational responses to crisis. *Trust in organizations: Frontiers of theory and research*, 261, 1996.
- Misztal, B. (1996). *Trust in Modern Societies*. Cambridge. Polity, 19.
- Nahapiet, J. (1996). Managing Relationships with Global Clients: Value-Creation Through Cross-Border Networks. In 16th annual conference of the Strategic Management Society, Phoenix, AZ.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review*, 23(2), 242-266.
- Nicholls, A. (2010). The institutionalization of social investment: The interplay of investment logics and investor rationalities. *Journal of social entrepreneurship*, 1(1), 70-100.
- Nisbet, R. A. (1969). *Social change and history: Aspects of the western theory of development*. New York: Oxford University Press.
- Norman, W., & MacDonald, C. (2004). Getting to the bottom of “triple bottom line”. *Business ethics quarterly*, 14(2), 243-262.

- North, P. (1998) 'Exploring the Politics of Social Movements through "Sociological Intervention": A Case Study of Local Exchange Trading Schemes', *The Sociological Review* 46(3): 564–82.
- North, P. (2007). *Money and Liberation*. University of Minnesota Press, London.
- North, P. (2014a). Ten square miles surrounded by reality? Materialising alternative economies using local currencies. *Antipode*, 46(1), 246-265.
- North, P. (2014b). Complementary currencies. In Parker, M., Cheney, G., Fournier, V., & Land, C. (Eds.). (2014). *The Routledge companion to alternative organization* (pp. 182–194). Routledge.
- Ouchi, W. G., & Cuchi, W. G. (1981). *Theory Z: How American business can meet the Japanese challenge* (Vol. 13). Reading, MA: Addison-Wesley.
- Pascale, R. T. (1990). *Managing on the edge: How the smartest companies use conflict to stay ahead*. New York: Simon and Schuster.
- PermanentCultureNow. (2012, October 26). *Bristol Pound the new Local Currency* [Video]. Youtube. <https://www.youtube.com/watch?v=KWZJcUyFspw> (Accessed on the 25/05/2020).
- Posner, R. A. (1997). Social norms and the law: An economic approach. *The American Economic Review*, 87(2), 365–369.
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1994). *Making democracy work: Civic traditions in modern Italy*. Princeton university press.
- Putnam, R. D. (2000). Bowling alone: America's declining social capital. In *Culture and politics* (pp. 223-234). Palgrave Macmillan, New York.
- Ring, P. S., & Van de Ven, A. H. (1992). Structuring cooperative relationships between organizations. *Strategic management journal*, 13(7), 483-498.
- Robertson, J. (1999). *The new economics of sustainable development. A report for the European commission*.
- Røpke, I. (2020). Econ 101—In need of a sustainability transition. *Ecological Economics*, 169, 106515.
- Sako, M. (1992). *Price, quality and trust: Inter-firm relations in Britain and Japan* (No. 18). Cambridge University Press.
- Sanz, E. O. (2016). Community currency (CCs) in Spain: An empirical study of their social effects. *Ecological Economics*, 121, 20-27.
- Scott, J. (1991). *Social Network Analysis: A handbook* Sage Publications London UK.
- Seyfang, G. (1997). Examining local currency systems: a social audit approach. *International Journal of Community Currency Research*, 1(1), 1-29.

- Seyfang, G., & Longhurst, N. (2013). Growing green money? Mapping community currencies for sustainable development. *Ecological Economics*, 86, 65-77.
- Seyfang, G., & Longhurst, N. (2016). What influences the diffusion of grassroots innovations for sustainability? Investigating community currency niches. *Technology Analysis & Strategic Management*, 28(1), 1-23.
- Seyfang, G., Smith, A., (2007). Grassroots innovations for sustainable development: towards a new research and policy agenda. *Environ. Polit.* 16 (4), 584–603.
- Seyfang, G. (2009). *The New Economics Of Sustainable Consumption: Seeds of Change*. Palgrave Macmillan, Basingstoke
- Seyfang, G. (2010). Low-carbon communities and the currencies of change. In *Low Carbon Communities: Imaginative Approaches to Combating Climate Change Locally* (pp. 108-122). Edward Elgar Cheltenham.
- Seyfang, G. (2004). Time banks: rewarding community self-help in the inner city?. *Community Development Journal*, 39(1), 62-71.
- Shuman, M.H. (2000). *Going Local!* Routledge, New York.
- Southerton, D., Chappells, H., Van Vliet, V. (2004). *Sustainable Consumption: The Implications of Changing Infrastructures of Provision*. Edward Elgar, Aldershot
- Strange, T., & Bayley, A. (2008). *OECD Insights: Sustainable Development: Linking Economy, Society. Environment*.
- Sunstein, C. R. (1996). Social norms and social roles. *Columbia Law Review*, 96(4), 903–968.
- Szreter, S. (2000). Social capital, the economy, and education in historical perspective. *Social capital: Critical perspectives*, 56-77.
- TEDx Talks. (2011, December 15). *TEDxBRISTOL 2011 – Ciaran Mundy – The Bristol Pound* [Video]. Youtube.
<https://www.youtube.com/watch?v=YgSAzAGvxEM&list=WL&index=31&t=0s> (Accessed on the 25/05/2020).
- Turnbull, S. (2009). Options for rebuilding the economy and the financial system. Available at SSRN 1322210.
- United Nations. (1987). *World commission on environment and development*. Available at <http://www.un-documents.net/wced-ocf.htm> .
- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative science quarterly*, 35-67.
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications* (Vol. 8). Cambridge university press.

Williams, C., T. Aldridge, R. Lee, A. Leyshon, J. Tooke and N. Thrift (2001) *Bridges into Work: An Evaluation of Local Exchange Trading Schemes*. Bristol: The Policy Press.