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Complementary Money for Democracy

A multiple-case study of four complementary currencies in northwestern Europe from a perspective of radical democracy

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Abstract

Democracy is facing mounting challenges in today's globalised world, with rising inequalities and unsustainable practices. Yet money creation and design are kept independent of popular control despite the substantial impacts they have on the development of society and the well-being of its citizens. Some movements have challenged this demarcation and created their own currencies; complementary currency initiatives. This study aims to explore *in what ways they may contribute to a democratic society and economic democracy*. It utilises a qualitative, multiple-case study design examining four complementary currencies in northwestern Europe and explores commonalities in the potential ways they contribute to a democratisation of the economy. Through semi-structured interviews with representatives and members of these currencies, examined through thematic analysis, it finds that they contribute to democracy by creating a community characterised by mutual support, transparency and accountability; to politicising money creation through the promotion of reflection and education; and in protecting local economic power and diversity. Thus, by keeping money local, the population has a new tool to construct their circumstances according to their needs. However, further research is required to measure these impacts in more detail while contrasting different currency designs and contexts.

Key words: Democracy, Radical Democracy, Economic Democracy, Complementary Currencies, Money, Globalisation, Localisation.

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Acronyms

EMU – The Economic and Monetary Union

EU – The European Union

GDP – Gross domestic product

IPCC – The Intergovernmental Panel on Climate Change

LETS – Local exchange trading system

SDG – Sustainable Development Goal

SME – Small- and medium-sized enterprise

TNC – Transnational corporation

UNCTAD – The United Nations Conference on Trade and Development

WTO – The World Trade Organization

1. Introduction

> At present, too many people in too many places are integrated into a world economy that delivers inequitable and unjust outcomes. (UNCTAD, 2017, p. XII)

The saying goes that money rules the world, yet money itself seldom receives much interest. There is however an increasing awareness that money is not a neutral mechanism to facilitate exchange, but by its very design produces certain outcomes (Kennedy, 2010; Blanc et al., 2018; Barinaga, 2020; Dietsch, 2021). For one, a majority of money is created as debt which then needs to be repaid with interest thus requiring an ever-increasing money supply and future productivity (Graeber, 2013; Mellor, 2016). The design of the monetary system therefore necessitates perpetual growth, which in turn compels continued exploitation of natural resources beyond planetary limits (Kallis, 2011; Daly, 2014; IPCC, 2021). Furthermore, the interest paid on the debt-based money is distributed unequally in society where 80% pay more than they receive, 10% earn a little, and the top 10% earns the majority of the money paid by the rest (Kennedy, 2010). Thus, it contributes to an unequal redistribution as those earning interest on capital are inherently favoured over those earning income through labour.

The design of the monetary and financial system also produces recurring financial crises. Due to commercial banks' pro-cyclical lending, where lending excessively increases in 'good times', introducing more money to the system than is justified by actual growth leading to inflation or asset inflation due to price speculation bubbles which result in financial crises (Monneta, n.d.; Soros, 2008). Some further argue that modern money creation is unjust, as those with collateral are favoured to receive credit (Dietsch, 2021). Furthermore, as commercial banks are private, for-profit actors, they tend to grant credit to what is perceived as most profitable rather than to long-term investments which profit society as a whole (Johanisova & Wolf, 2012).

Despite the influence that money creation has on society, there is a lack of democratic oversight as central and commercial banks act independently (Berman & McNamara, 1999). In fact, globalisation, defined as the "ever-increasing integration of national economies into the global economy through trade and investment rules and privatization, aided by technological advances" has further reduced democratic controls over the economy (Hines, 2013, ch.1) as national governments are then limited in their policy options (Held, 2006). There are, however, movements that question this lack of democratic oversight and take monetary design into their own hands; complementary currency initiatives.

Complementary currency schemes have been initiated and developed in both the Global North and South, estimates putting the current number at between 3,500 to 4,500 (Lietaer & Dunne, 2013; Fare & Ould Ahmed, 2017). The rationale behind the creation and design vary but they share that they are deliberately designed to produce certain outcomes reflective of local contexts and needs. These currencies are nothing new, and they are nothing new to the development agenda. Carroll and Bellotti (2015) describe how a planning document drawn up as a part of the United Nations Millennium Declaration called on governments:

> To make serious commitments to restructure the global financial architecture based on principles of equity, transparency, accountability and democracy, and to balance, with the participation of civil society organizations, the monetary means to favour human endeavour and ecology, such as an alternative time-based currency. (p. 1509)

While this phrasing is not included in the final version, it states a need for an equitable, transparent and non-discriminatory financial system (UN General Assembly, 2000). The 2030 Agenda for Sustainable Development, (UN General Assembly, 2015), similarly, does not mention a radical change in the financial and monetary architecture but among the Sustainable Development Goals (SDGs) one can find; 8: Decent Work and Economic Growth; 10: Reduced Inequalities; 12: Responsible Consumption and Production; 13: Climate Action; and 16: Peace, Justice and Strong institutions requiring inclusive development and accountability, all issues which are connected to our monetary and financial system. In envisioning a sustainable world, it states that democracy is essential for sustainable development (UN General Assembly, 2015). While both 'sustainability' and 'development' are contested concepts, and the SDGs expose inherent contradictions between the two (Swain, 2018), for the purpose of this essay sustainability is understood as meeting present needs without compromising those of the future (World Commission on Environment and Development, 1987). Furthermore, in this thesis development will not be discussed in terms of aid interventions (Esteva, 2010), but rather as societal change with a positive connotation as the improvement of economic, social, and political conditions (Lund, 2010). As the global economic system presents challenges to equal prosperity, development in monetary design could be significant.

The design and creation of money has an enormous impact on society yet lacks democratic oversight and tends to reproduce undemocratic ends such as inequality. This study therefore aims to explore how complementary currencies, as alternative money innovations, can contribute to the continued development of our financial system and society in line with principles of democracy, including transparency, accountability and equality, and thus produce conditions for a more democratic society.

1.1 Purpose

This study aims to explore money as a medium for democracy by investigating how complementary currencies may contribute to a democratisation of the economy.

1.2 Research questions

The study is guided by the following research questions:

i) In what ways can complementary currencies contribute to a democratic society?

ii) In what ways can complementary currencies contribute to economic democracy?

1.3 Overview

This study is a multiple-case study of four complementary currencies situated in northwestern Europe; WIR (Switzerland), Chiemgauer (Germany), Vix (the Netherlands), and Bristol Pound (United Kingdom), based on interviews with representatives and members. First, the concept of money and its connection to democracy will be introduced, along with a discussion of complementary currencies and their impacts. Second, radical democracy and economic democracy will be delineated as the theoretical foundation of the analysis. Third, the methodological choices and process will be discussed, as well as limitations to the study. Fourth, the analysis will examine the main themes identified in the interviews in relation to democracy. Finally, a discussion of the findings will be included followed by conclusions and implications for future research.

1.4 Delimitations

This study examines two types of complementary currencies and explores their shared potential contributions to a democratic society and economy; it does not make inferences regarding actual measured impacts based on specific contexts, which other studies have already done

(Lepofsky, 2009; Ruddick, 2011; Marshall & O'Neill, 2018; Dini & Kioupkiolis, 2019; Martín Belmonte et al., 2021; Matti & Zhou, 2022). Furthermore, although complementary currencies are found globally, in diverse contexts, this study is limited to four cases situated in developed democracies in northwestern Europe, and its implications are therefore not necessarily generalisable beyond that context.

2. Literature review

Money is increasingly understood to not be a mere neutral medium of exchange and so alternative monetary systems to fiat money are gaining increased attention in research (Blanc et al., 2018; Barinaga, 2020; Dietsch, 2021). This section will begin by providing a brief introduction to the concept of money and the economic system's connection to democracy. It will then introduce different types of complementary currencies followed by research focusing on the impacts of these currencies on economic, social and political life.

2.1 What is money?

Money is commonly assumed to have emerged as a preferred medium of exchange, to make trade more efficient through exchange with a resource of intrinsic value (Gomez, 2018), this is sometimes referred to as the myth of barter (Graeber, 2011). However, lately the social construction of money as an institution, created by debt relations has been emphasised (Graeber, 2011; Gomez, 2018). Money is expected to fulfil four standard functions; unit of account, means of payment, medium of exchange, and store of value (Peacock, 2014). This type of money is often denoted 'all-purpose money' (Peacock, 2014). There is also 'special-purpose money' which seldom fulfils all criteria, which is common for complementary currencies which have specific aims (Blanc et al., 2018; Hornborg, 2021).

Money is often divided into two categories; commodity money and fiat money. Commodity money is backed by real value in the form of some commodity, typically precious metals, which ensures the value of the currency (Boyce, 2023). Conversely, fiat money lacks intrinsic value but instead relies on trust and confidence in the government that issues it (Chen, 2022). Fiat paper money is issued by a central bank or treasury, independent of democratic oversight (Chen, 2022; Berman & McNamara, 1999). However, today the value of fiat paper money is dwarfed by the money issued by commercial banks through the creation of credit, when granting a loan, they create money as a debit and credit (Ryan-Collins et al., 2012). A popular misconception is that banks loan already deposited money, or is linked to reserves at a central bank, but the ability to create money is only weakly linked to reserves held (Ryan-Collins et al., 2012). In the UK, about 3.5% of GDP circulates as cash, in Germany, a country with a strong cash culture, it is still only about 8.5% (Khiaonarong & Humphrey, 2019).

2.2 Democracy and money

In regards to lacking democracy in the monetary sector, Mellor (2016) argues that while the money system is privatised - private banks dominate the creation and circulation of money - the public are still liable for it, exemplified by the bank bailouts following the 2008 financial crisis. Mellor (2016) thus argues for a democratisation of money through a transition to debt-free money. Others argue that the delegation of responsibility of fiscal policy to economists, at commercial and central banks who lack democratic oversight and control, consciously depoliticises an important tool of social policy (Berman & McNamara, 1999; Best, 2018). Despite the influence that central and commercial banks have on the economic and political direction for billions of people, they are not democratically accountable - in fact bank independence has increased since the 1990s (Berman & McNamara, 1999; Bodea & Hicks, 2015).

There are also other limitations to democratic control in the economic sphere. Even in northwestern Europe which has a long tradition of democracy, the options to intervene in the economic sphere are limited (Held, 2006) due to for example trade agreements by the World Trade Organization (WTO) aimed at liberalising trade (Bohne, 2016). Control by national governments is further limited by membership in the European Union (EU) and the Economic and Monetary Union (EMU); by conforming to EU legislation and adopting the euro as their national currency, economic control is delegated to a supranational organisation which has been argued to suffer a democratic deficit (Follesdal & Hix, 2006). And while northwestern European countries are wealthy, placing in the top 35 globally according to GDP per capita (The World Bank, 2021), there are regional differences. Financial globalisation, the intensified international trade and global money flows (Gravina & Lanzafame, 2021), has increased inequality in Europe (Sánchez López et al., 2019). As money is increasingly traded for money (Hart, 2011), wealth concentrates among those with capital, including a few large corporations (UNCTAD, 2017), who benefit from externalised costs, subsidies, and easy access to capital, which has led to 70% of global trade to be controlled by 500 corporations (Hines, 2013). Moreover, these powerful transnational corporations (TNCs) lack accountability due to their global reach (Koenig-Archibugi, 2004).

2.3 Interest

The unequal distribution produced by the mainstream monetary system is sometimes attributed to interest, as a fortunate few earn far more interest than they pay (Kennedy, 2010; Latsch, 2013). Silvio Gesell developed a theory of a new form of money without interest, the 'Freigeld', which favours money's function as a medium of exchange, finding that money's imperishability gives it an unfair advantage to other commodities (Peacock, 2014). This is exploited by owners of money demanding a 'fee' for trading money for a commodity that not only goes to the merchants, but importantly their potential creditors (Peacock, 2014). Gesell's Freigeld was constructed to oppose this effect, by making money perishable therefore removing its advantage as a store of value. This was to be done by a form of demurrage, a built-in depreciation of the currency (Godschalk, 2011).

2.4 Complementary currencies

A range of complementary currencies have been inspired by the notion of zero-interest, developed by Gesell, as a design characteristic to direct the flow of the money to increase circulation and discourage hoarding and speculation (Peacock, 2014). While complementary currencies differ in their aims and designs, they share that they act as a supplement to fiat money, exemplified by them being 'complementary' (Lietaer, 2001). Complementary currencies have a long history, from 'ghost money', functioning as a unit of account in the Middle Ages, which gained particular momentum during the great depression as money became scarce (Peacock, 2014). During the 1930s 'tax anticipation scrip' was issued in the USA by city municipalities and accepted as payment for local taxes, and in Austria a similar currency, the Wörgl was established (Peacock, 2014). Complementary currencies saw a boom in the 1980s with the start of local exchange trading system (LETS) schemes, focused on improving local trade (Fare & Ould Ahmed, 2017). In general, parallel currencies have proliferated during financial crises and recessions (Seyfang & Longhurst, 2013).

Complementary currencies can be perceived as a social innovation responding to economic, ecological, and social concerns (Gelleri, 2022). As a response to a broad range of issues, they vary widely in their organisation, technology, participation, scope, and impacts (Seyfang & Longhurst, 2013). Meyer and Hudon (2019) delineate between three types of complementary currencies; community currencies, inter-enterprise currencies, and cryptocurrencies. Community currencies are created by civil society groups to promote sustainable development, social capital and cohesion, and local economic activity; inter-enterprise currencies are often business-to-business undertakings to counteract economic cycles by fostering exchanges between small- and medium-sized enterprises (SMEs); cryptocurrencies are a form of decentralised digital cash (Meyer & Hudon, 2019). While cryptocurrencies and blockchain technology can provide possibilities for democracy (Firth, 2017), they are outside the scope of this thesis. Community currencies are often further distinguished; Seyfang and Longhurst (2013) identify four major types; mutual exchanges, local currencies, barter markets, and service credits. Mutual exchanges, often referred to as LETS-schemes, function through the creation of credit aimed at supporting local economies and social cohesion. Local currencies are geographically bound to increase the local circulation of money (Seyfang & Longhurst, 2013). Barter markets provide an infrastructure for exchanging goods and services at specific events through a local, non-convertible, currency (Gomez, 2010). Service credits is a currency form in which time is the unit of account, often called time banks, therefore valuing everyone's labour the same (Cahn & Gray, 2015).

2.5 Impacts of complementary currencies

While the motivations and designs of complementary currencies differ, they share the potential for change along certain dimensions; economic, social, and political (Fare & Ould Ahmed, 2017). These will be discussed respectively, drawing on affiliated research regarding impacts.

2.5.1 Economic dimensions

One aim shared by most complementary currencies is improving economic inclusion and opportunity among their members by promoting local economic activity. As such they respond to the global economic system in which capital flows unevenly towards locations offering the largest potential return, producing inequality and forcing people who cannot compete on equal terms to turn to welfare or the informal sector (Pacione, 1997).

To tackle the challenges of globalisation, complementary currencies promote economic opportunities through a closed network within which the currency can be spent, and therefore enjoys increased circulation among the participants through the multiplier effect (Fare, 2018). The impact is illustrated by the spending multiplier generally being higher with complementary currencies; the currency circulates more times within the community before leaving than do fiat currencies (Groppa, 2013). This provides improved opportunities for local businesses to benefit from trade in the region. The same impact can be felt from the generally higher velocity of complementary currencies, a higher rate at which money circulates (De La Rosa & Stodder, 2015). This is the product of built-in mechanisms, inspired by Gesell's theory of Freigeld, in which interest-free or even negative interest through demurrage promotes spending (De La Rosa & Stodder, 2015).

However, the effect that complementary currencies have on localising trade is debated (Matti & Zhou, 2022). Some argue that since local trade is still reliant upon global value chains, shopping with a local tradesman does not necessarily entail that money stays local or that it positively impacts the climate through shortened transportation (Marshall & O'Neill, 2018). Ruddick's (2011) study of the Eco-Pesa programme in Kenya illustrates this issue; use of the currency resulted in a 22% average increase in income for participating businesses, yet a majority of products sold were not local. In their study on Bristol Pound, Marshall and O'Neill (2018) found that free trade and movement of capital coupled with power of global corporations, present barriers for localising trade that complementary currencies cannot overcome.

Some complementary currencies further focus on financial exclusion and fighting poverty by providing accessible credit, examples include Accorderie in Canada (Fare, 2018), WIR in Switzerland (Stodder, 2009), and Sardex in Sardinia (Dini and Kioupkiolis, 2019). Access to (interest-free) credit benefits the local economy by improving solvency for SMEs who often lack equal opportunities to receive credit as do larger corporations, particularly in poor economic times (Stodder, 2009; Sartori & Dini, 2016). Others function as a type of Universal Basic Income (UBI) such as the Gyeonggi Local Currency in South Korea (Kim, 2020) and REC in Barcelona (Martín Belmonte et al., 2021). In the REC case, distributing governmental cash assistance via a complementary currency not only benefited the people with additional purchasing power but also local businesses, particularly SMEs, who witnessed increased traffic as the money could only be spent with them (Martín Belmonte et al., 2021).

2.5.2 Social dimensions

While some currencies strive to improve economic conditions along mainstream economic logic, many share the aim of shifting attention away from market values to solidarity and ecology (Fare & Ould Ahmed, 2017). As such, the impacts of these alternative currency schemes are often centred around producing a shift in values and norms (Sahakian, 2014; Fare & Ould Ahmed, 2018). Michel and Hudon (2015) conducted a systematic review of community currencies and found them to contribute to building trust, fostering stronger relationships and promoting social inclusion, as such strengthening social sustainability (Michel & Hudon, 2015). The complementary currency's role in building social cohesion has been equally identified in studies of Sardex, in which the mutual credit system is not only dependent on trust but also reinforces it (Dini & Kioupkiolis, 2019). As the global money system is argued to erode social capital, promoting selfish and non-collaborative behaviours, creating money with social aims could contribute to sustainability (Lietaer et al., 2012). In regards to producing social capital, Seyfang (2002) found that timebanks contributed to the participation of socially excluded groups in community networks, producing new channels for mutual support, reciprocity and trust.

The way in which complementary currencies can promote community integration is by enabling relative neighbours to engage personally with each other, in contrast to the modern economic system which encourages isolation (Degens, 2016; Oliver Sanz, 2016). The creation of a community was explored in Lepofsky's (2009) study of the PLENTY currency in North Carolina, finding that complementary currencies have the potential of producing a community from strangers, through the creation of a space in which reflection over strangeness and belonging can produce social relations. Furthermore, Degens (2016) finds that complementary currencies are used differently from fiat currencies as users tend to ascribe particular meaning to it, as a social money, and is often used for bonus payments and other activities to promote staff cohesion, and as such may contribute to community building. Complementary currencies may therefore contribute to reciprocity and gift-giving, expressing a social character of the money (Degens, 2016). A survey of Spanish complementary currency participants similarly found that a majority of respondents believed it would improve the functioning of the community, by improving community social capital through participation, trust, and esteem (Oliver Sanz, 2016).

However, despite complementary currencies' contribution toward social and solidarity values, they have failed to significantly impact social inequalities, including gender inequalities (Fare & Ould Ahmed, 2017). Similarly, while Gómez (2010) found that local complementary currencies could support low-income groups to improve their standard of living, they are not a general tool for poverty reduction as the poorest groups lacked necessary resources to participate in the trade.

2.5.3 Political dimensions

Complementary currencies have also been examined from a political perspective. They have been identified as political movements and as encouraging reflection on what is political, politicising money and value (Fare & Ould Ahmed, 2017). Thus, the very nature of the currencies, which provides an alternative to the monetary order, creates new spaces for protest against the same (Fare & Ould Ahmed, 2017). At their core, complementary currencies are normative, they serve a specific purpose, although to varying degrees; some seek reform while others challenge the idea of markets and capitalism (Guéorguieva-Bringuier & Ottaviani, 2018; Larue et al., 2022).

Studies on the Sardex currency have been particularly focused on the currency's political potential, both as a form of political action beyond conventional liberal politics (Dini & Kioupkiolis, 2019) and as supporting the emergence of collective action (Bazzani, 2020). The Sardex currency is found to illustrate an effective and significant form of alter-politics; the creation of a currency itself forms a political activity which may challenge dominant political structures (Dini & Kioupkiolis, 2019). As such, the main democratising aspect of the zero-interest, mutual credit currency is found in its challenge of the unequal financial power of the state and commercial banks by distributing it in collaborative network of SMEs (Dini & Kioupkiolis, 2019). Importantly, the business activities within the Sardex network are considered by the participants as a form of collective action which promotes socio-economic local development (Bazzani, 2020).

Studies which examine money from a democratic perspective often draw from Ostrom's (2010) conception of the 'commons', finding that money is a social good to be governed collectively (Dietsch, 2021). Moreover, as money is a man-made commons, the governance of the design and not only its uses are essential to managing it in a democratic fashion. Barinaga (2020) therefore distinguishes between two levels of governance; who governs the flow of monetary units and who decides the rules of the monetary system. In evaluating democracy in a complementary currency called Sarafu, Barinaga (2020) finds some democratic tendencies in the flow of money but that the rules governing the monetary system are still based on a market logic.

Complementary currencies not only have political transformative aspects but also pedagogical ones (Eskelinen & van der Wekken, 2022). In their investigation of the Helsinki timebank, Eskelinen and van der Wekken (2022) found collective learning and negotiation to be important parts of the contribution of timebanks, in illuminating the ‘core economy’ and in educating about commoning and direct democracy. The educating aspect of complementary currencies could be important in the future development of the economics field, as Valek (2014) identified that higher education in Europe seldom includes alternative money systems in their curricula.

A complementary currency can therefore be seen as a political project, both in that it functions as a tool for collective action for development of one’s community and as it politicises money, opening up the design and creation of money to public debate and consideration. However, as Fare and Ould Ahmed (2018) point out, it is mainly the leaders who appreciate the political component as such while members’ expectations are more practical in nature.

2.6 Contribution

The existing literature has illustrated and emphasised that money and its creation are inherently political, and that in a democratic society it holds potential for future development. Complementary currencies have been found to contribute to economic inclusion and local economic development, social sustainability through community building, but their contribution to a democratic society remains understudied. This thesis seeks to address this knowledge gap by exploring how complementary currencies can enhance democratic practices and values within the economic system.

3. Theory

This section will introduce the theoretical framework of this thesis, building on democratic theory, specifically radical democracy and the concept of economic democracy.

3.1 Democratic theory and democratic criteria

Democratic theory has a long and diverse tradition, spanning from classical models in ancient Athens, to Renaissance republicanism, liberalism during the enlightenment, to newer models of participatory democracy (Held, 2006). The concept of democracy and what subsequently constitutes a democratic society is thus ambiguous, used to denote a wide range of processes and societal forms. However, there are some common denominators. The word democracy is derived from the Greek word dēmokratia, literally meaning rule by the people (Dahl, 2023), and this popular rule is envisioned to be achieved with features including effective participation, regular elections, accountability and liberties (Levine & Molina, 2011; Quaranta, 2018; Boese, 2019).

Dahl (2015), a prominent democracy theorist, argues that the defining characteristic of a democratic process is that the members are politically equal, which is ensured by five criteria; i) effective participation, ii) voting equality, iii) enlightened understanding, iv) control of the agenda, and v) inclusion of [all] adults. Essentially a democratic society should make sure to provide equal and effective opportunities for members to participate, vote, learn about the relevant issues, and decide which issues are to be on the agenda (Dahl, 2015). Furthermore, the eligibility to participate in the democratic process needs to be inclusive and broadly encompassing. Finally, awareness is essential, without an informed understanding of various choices and possibilities there can be no effective opportunities for participation and deliberation.

3.2 Radical democracy

While Dahl presents criteria to ensure that participants are politically equal, thus ensuring a democratic process, there are debates on how to achieve the necessary conditions for this in the context of a modern, arguably unequal, society. Theorists of radical democracy are particularly vocal in their critique of mainstream liberal democracy, as its demarcation of the public and private limits democratic politics to the world of governments, thus excluding important areas of contestation (Little & Lloyd, 2009; Held, 2006). Furthermore, it is argued that liberal democracy, characterised by competitive representation, lacks accountability and so political autonomy cannot be realised, and that inherent inequalities affect opportunities to influence (Cohen & Fung, 2004). The permeating argument is that current democratic systems are vulnerable to variations in capacities to mobilise support, due in part to differences in wealth, social and political capital. Thus, radical democrats are concerned with how to promote effective and inclusive participation and strengthen accountability in a world that is becoming increasingly disassociated from the local contexts and overtaken by corporate power (Wolin, 2017).

Radical democrats therefore intend to re-politicise areas of non-contention, areas which have become depoliticised - denied of political contingency and therefore not under democratic deliberation (Flinders & Wood, 2014). While radical democracy, like democratic theory at large, does not constitute one coherent framework or vision of democracy, the various traditions do share commonalities. Radical democrats favour increased participation by the citizenry combined with opportunities for self-government, beyond the limits of representative government (Lloyd & Little, 2009). Interestingly, while they critique liberal democracy, liberal norms and ideals such as freedom and equality are found to be essential to extend and deepen democracy, finding that inequalities undermine opportunities to exercise classical liberal rights (Lloyd & Little, 2009). Finally, democracy is not thought of in terms of aggregating pre-existing needs and opinions, but the way in which these interests, and associated identities, are articulated (Lloyd & Little, 2009). This is an important point, that the electorate cannot be perceived to have fixed preferences but that these are formed.

The importance of local contexts is particularly characteristic of radical democracy, which emphasises the creation of new political spaces at the local level (Conway & Singh, 2011). While the position towards globalisation varies, for instance Mouffe (2002) argues for improved supranational democratic governance, many instead argue for localisation - "a process which reverses the trend of globalization by discriminating in favour of the local" (Hines, 2013, ch.1). The preference for local decision-making and action is motivated from an epistemological standpoint, in that one cannot know the world beyond a 'human' scale; one learns of the world in a subjective manner in cultural time and space (Esteva & Prakash, 2014). Democracy cannot therefore be reduced to its modern institutions but should promote increased local governance from bottom-up initiatives which are better adapted and accountable to the local populace (Conway & Singh, 2011).

3.2.1 Deliberative and agonistic radical democracy

There are two main traditions within radical democratic theory in regards to how politics should be organised. The first, deliberative democracy, aims to increase direct participation through deliberations to find consensus (Habermas, 1998). Such processes are perceived to improve democracy by promoting the active participation of the people to review arguments and therefore better inform themselves and make decisions based on *reason,* thus overcoming power disparities (Cohen, 2007). Furthermore, it is assumed to better solve practical problems as collaborative identification of issues and solutions, and testing solutions in the local context, would provide advantages to systems which are disconnected from the individual (Cohen & Fung, 2004). However, there are inherent contradictions between participation and deliberation, as the first seeks to increase inclusion in the decision-making, while the other seeks to improve the quality of participation which therefore limits the scale of such practices (Cohen & Fung, 2004).

A second tradition in radical democracy is the agonistic post-structuralism advocated by Laclau and Mouffe (2001 [1985]) in which the agonistic contestation between adversaries is argued to be essential to politics. Mouffe (1999) finds deliberative democracy's focus on consensus and *reason* to preempt democratic pluralism, by neglecting *power* and antagonism and their position in social relations. To achieve a better democratic system therefore entails establishing institutions which nurture agonism. In contrast to deliberative democracy which aims to overcome the us/them distinction, Mouffe (1999) argues that we must establish the us/them demarcation to be compatible with pluralist democracy. Hoping to find rational consensus, Mouffe (1999) argues, will inevitably relegate certain issues to the private sphere, instead an agonistic approach is more receptive to the plurality of voices and opinions and the power complexities constituted in society. The key point for Laclau and Mouffe (2001 [1985], is to not limit politics to one determined space and to "... identify discursive conditions for the emergence of a collective action, directed towards struggling against inequalities and challenging relations of subordination." (p. 153).

3.2.2 Lack of institutional framework

Radical democracy has not only experienced diversity among its proponents but has been critiqued regarding its 'radical' nature (Little & Lloyd, 2009). The argument goes that while it may challenge orthodox models of liberal democracy, radical democracy fails to delineate a coherent alternative that is radically different from liberal democracy (Little & Lloyd, 2009). While deliberative democracy may present a more realised form, it is argued to not be scalable (Friedman, 2006). Graeber (2013) refutes this argument in that there should not be a blueprint; what works in one context and on one level is not necessarily applicable to others and the point is identifying how radical democracy can best be constituted. Radical democrats in general do not find the lack of a coherent model to be a flaw, democracy is an ongoing, never-ending, project (Little & Lloyd, 2009). As we cannot know the future, such a blueprint may instead constrain radical elements and, indeed, render them not so radical.

This thesis applies the theoretical arguments of radical democracy in expanding democratic practice to spheres not considered political in liberal democracy, particularly the economy and monetary policy. Instead of evaluating decision-making processes, for which radical democrats lack a coherent ideal model, this thesis instead applies radical democratic principles in evaluating how the complementary currencies may more broadly contribute to conditions for democracy. Thus, the analysis applies ideas from both deliberative and agonistic traditions to identify in what ways complementary currencies could contribute to an expanded understanding and practice of democracy. These include creating conditions for equal participation beyond modern institutions, how values of equality and freedom inform practices, expanding what is considered political, and acknowledging that preferences are cultivated.

3.3 Economic democracy

As this thesis is specifically focusing on the democratisation of the economy, this section will briefly introduce the concept of economic democracy. The notion of economic democracy is based on the same moral argument of democracy, that is equal liberty, and that it should similarly justify economic democracy in order to maximise individual freedom (Archer, 2002). As democracy has been proven to produce desirable outcomes in the form of avoiding tyranny, guaranteeing essential rights and personal freedoms, self-determination, peace and prosperity, by helping people to protect their own interests and fostering better communication and education of their people (Dahl, 2015), it could arguably produce similar outcomes when applied to economic interests.

While there is a case for economic democracy, what this entails varies. Archer (2002) discusses economic democracy based on the ‘all-affected principle’, that all those affected should be able to exercise some control, which would include consumers, local residents, and banks. While mainly aimed at cooperatives, it emphasises that although many are affected by private economic activity there is a lack of reverse influence. Other projects aimed at economic democracy include participatory budgeting which allows citizens and organisations to directly participate in the decision-making regarding fiscal policy, thus changing people’s role in society and society itself (Marquetti et al., 2012). However, a limitation was found in that participatory budgeting only concerns the government budget despite a majority of the economy being private (Marquetti et al., 2012). This concern illustrates the need for economic democracy to encompass both private and public realms.

Johanisova and Wolf (2012) provide a broad definition of economic democracy which is not restricted to either the private or public sphere: “a system of checks and balances on economic power and support for the right of citizens to actively participate in the economy regardless of social status, race, gender, etc.” (p. 564). The important factor in this definition of economic democracy is decentralisation of economic power and the ability to participate in the economy, and therefore in society, on an equal basis, which aligns with radical democracy in many ways by emphasising equal participation and power. Johanisova and Wolf (2012) suggest various manifestations of economic democracy including regulation of markets and corporations, support for co-operative, social enterprises, and democratic money creation processes.

4. Methodology

4.1 Research strategy and design

In order to identify potential common characteristics and shared perceptions of how complementary currencies may contribute to a democratic society and economy, this study utilises a qualitative, multiple-case study design (Clark et al., 2021). A qualitative research strategy is appropriate for studying subjective experiences to generate deep insights into a particular topic, and a multiple-case study design further contributes to identifying possible trends, especially when little is previously known of the topic (Stake, 2013; Clark et al., 2021). This study explores four cases of complementary currencies: WIR (Switzerland), Chiemgauer (Germany), Vix (the Netherlands), and Bristol Pound (United Kingdom).

4.2 Epistemological and ontological considerations

The study builds on interpretivist epistemology and constructivist ontology, finding that social phenomena are constructed socially and are therefore subjective, and consequently cannot be studied using methods of natural science (Clark et al., 2021). Instead, the researcher interprets interpretations by others, sometimes called 'double hermeneutic', which requires reflexivity, reflection over the production of knowledge (Clark et al., 2021). Thus, the methods used in this study are semi-structured interviewing and thematic analysis, to be able to reflect a range of subjective ideas, not to limit or in any way constrict the results to predetermined categories or paradigms.

4.3 Data collection

4.3.1 Purposeful sampling

The selection of interview subjects is based on purposeful sampling of representative cases of complementary currencies; they are selected because they can effectively inform an understanding of the researched phenomenon (Creswell & Poth, 2018). As a representative case of a complementary currency, the currency was to circulate in the economy, not requiring constant conversion which would render the currency more of a gift card. However, conversion could still be possible. A first selection of currency cases was based on them being situated in a democratic, European country to produce a more coherent and comparable sample. A range of currencies for which contact details were available were then contacted and all who expressed an interest were followed up upon. When four currencies had committed, it was concluded that they provided an appropriate scope for this study. The representatives provided access to members who used the currencies. The interviews were conducted in the period of January to March 2023. A total of 11 persons were interviewed.

4.3.2 Semi-structured interviews

The empirical material is collected using semi-structured interviews conducted in English and German. Interviews were performed with both representatives and members of the complementary currencies to enable a nuanced exploration of how complementary currencies may manifest democratic tendencies within the economy, and importantly how these are realised among the users. In one case, only a representative was interviewed, this is discussed in limitations.

The interview format (Appendix 1) combines relatively standardised questions and more open topic discussions, reflecting the aim of the study in analysing perspectives from across the interviewees on the topic of democracy (Patton, 2014). The use of a semi-structured interview approach enables amending and changing the order of pre-determined questions to address salient responses and is suitable for exploring perceptions across cases (Hammett et al., 2014). A first, pilot, interview was conducted with a Swedish currency to enable a reflection on the interview questions and themes, which is not included as empirical material as it was not representative of the type of complementary currencies this study seeks to explore.

To enable a broader geographical scope, the interviews were conducted as video calls (Clark et al., 2021), in platforms which were acceptable to the interviewed subject. The platforms were Zoom, Skype, and Teams. The interviews were recorded and subsequently transcribed and sent to the respondent for verification to ascertain that it was reflective of their intended meaning. Two interviews departed from the normal format in that they were conducted in full or partially in written form. Due to time constraints, one currency representative sent a previous, comprehensive, interview transcript and allowed for further questions to be asked in writing. Another respondent answered the interview questions in written form after which an oral interview was conducted to enable follow-up questions. This is discussed further in limitations.

4.4 Introducing the cases

Four complementary currencies constitute the cases for this research, three are active and one is currently discontinued. They represent a spread of motivations and practices which provides an encompassing exploration of the perspectives of the people involved. The currencies and interviewed participants are briefly outlined in Table 1.

The currencies exemplify two types of complementary currencies; inter-enterprise currencies and local currencies. They illustrate a range in longevity, scope, and motivations, but they also share important similarities. Chiemgauer, Bristol Pound and the Vix, currencies geographically limited to a city or a region, all aim to promote local trade with a particular focus on environmental concerns. WIR stands out as a currency available in all of Switzerland and so the focus is less on localised trade but rather to promote Swiss SMEs by mitigating money shortages through trade credit and accessibility to loans. Furthermore, all currencies share a vision of no interest to help boost circulation, discourage hoarding and speculation, and provide small businesses with better possibilities to participate in the economy by easifying repayment of credit. While the Bristol Pound was discontinued in 2021, there are plans to revive it in a new form; Bristol Pay in which transaction fees would support local charities, and in which tokens could be used to promote behaviour change towards more sustainable practices as well as improve democratic participation.

The governance of the currencies differ to an extent, in which Chiemgauer stands out with an overt focus on the democratic governance of the currency. WIR also began as a democratic cooperative, however due to Swiss banking regulations there are now more control mechanisms in place which limits the possibilities for extensively inclusive decision-making.

Table 1: The Cases

Currency	Location	Active	Members*	Currency design	Convertibility	Annual turnover	Interest and credit	Motivation	Management	Interviews
WIR	Switzerland	1934-	24,000 / 8,000 (2023)	Inter-enterprise currency, Bank WIR issues credit (digital), which the bank is liable for	Conversion not possible but value of 1 WIR = 1 Swiss franc	500 million (2022)	Bank WIR offers interest-free loans, interest-free deposits	Mitigate money supply shortage, improve access to credit for SMEs	Managed by Bank WIR, board of directors elected by a general assembly	1 representative and 2 members
Chiemgauer	Region around the Chiemsee, Bavaria, Germany	2003-	387 / 3,906 (2023)	Local currency, 3% of exchange is donated to a non-profit, demurrage of 3% every 6 months, physical and digital	1 Euro = 1 Chiemgauer	6.25 million (2020)	Previously interest-free, small loans through a governmental program, now interest-bearing	Promote local economy, secure employment and public infrastructure, promote local associations, decrease environmental impact	Strategic governance of Chiemgauer by the Chiemgauer association, board elected by members. Regiogeld UG managing daily processing	1 representative and 2 members
Vix	Alkmaar and surrounding region, Netherlands	2016-	120 / 100 (2023)	Local currency, digital	1 Euro = 1 Vix	15,632 (2022)	Interest-free mutual supplier credit, by cooperation in risk insurance fund	Promote local economy, make money stay local, decrease environmental impact	Vix is a part of Circuit Nederland, a network which governs the currency, strategic issues discussed with all currency communities, minor settings may be changed locally. Digital infrastructure by Cyclos	2 representatives and 2 members
Bristol Pound	Bristol, United Kingdom	2012-2021	600 / 1,300 (2015**)	Local currency, physical and digital	1 Sterling Pound = 1 Bristol Pound	1 million (2015**)	Interest-free, small loans introduced in 2019 but never issued	Promote local economy, decrease environmental impact	Managed by Bristol Pound Community Interest Company and the Bristol Credit Union, digital infrastructure by Cyclos	1 representative

* business/individual members
** 2015 was the 'peak' year of Bristol Pound

Source: Currency representatives and information found at their respective websites: WIR https://www.wir.ch/de/; Chiemgauer https://www.chiemgauer.info/; Vix https://vix.nl/; Bristol Pound https://bristolpound.org/.

4.5 Method of analysis

4.5.1 Transcription

No part of research is unbiased or neutral, and this is also reflected in transcribing which is essentially an interpretative process (Bailey, 2008; Eakin & Gladstone, 2020). The research utilises a denaturalised form of transcription, which is concerned with the substance of an interview, the meanings which are constructed and shared during the conversation, rather than providing a verbatim representation (Oliver et al., 2005). Furthermore, to improve the readability of the transcribed text, minor grammatical errors were corrected.

4.5.2 Thematic analysis

The method of analysis is thematic analysis, enabling the identification of common perspectives and ideas. This study utilises Braun and Clarke's (2021) model of reflexive thematic analysis, emphasising the reflexivity of the researcher, to practise critical reflection over one's role as researcher and of research practice. The method includes six phases; i) familiarisation with the data, ii) coding, iii) identification of initial themes by comparing emergent codes and theoretical concepts, iv) developing themes by comparing them to each other, to the codes and dataset, and to existing knowledge, v) defining the themes by producing a narrative to describe their properties, and vi) writing up (Braun & Clarke, 2021).

Before coding, which was conducted using NVivo, the dataset was thoroughly examined to gain an initial understanding and identification of potentially emergent ideas. The first coding cycle used open coding, which is employed to break down the data in separate parts, enabling an identification of commonalities and differences (Clark et al., 2021). The second coding cycle consisted in finding common categories for the codes inductively (Clark et al., 2021), to develop a conceptual organisation of the codes in relation to the theoretical background underpinning this research. The themes were then further examined in relation to the data and codes and analysed in relation to theory in a more deductive manner, a process of refining the themes. The process of writing was iterative and was instrumental in the production of the narrative around the themes.

4.6 Quality criteria

An encompassing model of quality criteria suitable for qualitative research is proposed by Tracy (2010) which includes eight ‘big tent’ criteria. The criteria are; “(a) worthy topic, (b) rich rigour, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence” (Tracy, 2010, p. 839). They emphasise (a) the importance of a relevant, significant and interesting topic, (b) providing abundance and complexity in data, (c) demonstrating reflexivity and transparency, (d) promoting credibility through thick description, triangulation, and multivocality, (e) resonating with the audience by making an impact, (f) contributing to knowledge, (g) ascertaining ethical procedures, and finally (h) that the study achieves its aims using appropriate methods and connecting the various parts of the study (Clark et al., 2021). These criteria have informed the study in the topic selection, in the sampling of sufficient empirical material, in the reflexivity approach to analysis, in using triangulation, striving for high ethical standards, and selecting appropriate methods. Triangulation is particularly important to improve credibility, and so this study utilises respondent validation in which the participants were sent the transcribed interview to confirm that it was reflective of their views.

Furthermore, the reflexive approach applied in this study emphasises that social research is not value-free, the researcher’s preferences influence the research in selecting a research area, the research questions, choice of method, analysis and interpretation, and so it is important to reflect about one’s positionality (Clark et al., 2021). As a European student, it was concluded that European cases would be most appropriate to study to reduce cultural barriers, and efforts have been made to reflect over contrasting potential interpretations of the empirical material. However, the qualitative researcher will always have some epistemological baggage and so it is impossible to be unbiased. Yet, that may not be desirable as it is the researcher’s interpretation of the data that adds value to the research (Eakin & Gladstone, 2020).

4.7 Ethical considerations

Ethical considerations are about balancing various legitimate interests, such as the production of new knowledge, individual privacy, and forms of harm (Swedish Research Council, 2017). The Swedish Research Council (2017) proposes some general rules for conducting ethical research which may be summarised as transparency, honesty, organisation, appropriate interaction with other research, and doing no harm. This study aims for honesty and transparency both towards the participants and in the production of this thesis which details the research process and analysis. In interacting with other research this study strives to include a variety of perspectives and review them in an appropriate manner. While the study does not concern sensitive topics or vulnerable participants, as the study aims to do no harm, it has considered the participants' wishes in relation to their participation. In particular, to ascertain factuality to avoid potential negative impacts on the currencies due to non-factual claims.

Informed consent was obtained through an online form with several boxes which the respondent had to check, in order to encourage them to absorb all the information (Salmons, n.d.). The form was sent out prior to the interview, allowing the respondent to read the form in their own time, consider the implications of their participation, and ask potential questions. The consent form template is available as Appendix 2.

4.8 Limitations

The range of the interview subjects was limited based on access which may create a bias as the directly contacted representatives supplied access to members open to be interviewed, who are likely generally more positive towards the currency. However, this bias in selection is found to not affect the aim of this qualitative study which seeks to explore the potential of complementary currencies and not establish general causality or impacts which would require a larger, randomised, sample (Clark et al., 2021). In one case only the representative was interviewed as the currency is discontinued and so the representative could not supply contact details to former members. Attempts were made to find former members through other channels but they proved unsuccessful. The analysis of the case data is thus limited to the management side of the currency. However, as members of the other currencies provided a broad scope of diverse perspectives and experiences, this limitation is not found to substantially affect the aim and analysis of the study as a whole.

As a cross-cultural research study, language skill can limit the responses received (Marschan-Piekkari & Reis, 2004). In the case of the English interviews there may have been a language bias as only those feeling confident in the language agreed to participate. Had the participants all been able to speak their mother tongue, the responses may have been more detailed and further respondents may have wanted to participate. However, despite varying command of the language, all were able to express themselves and also received the opportunity to review the transcript to correct any mistakes. Furthermore, two interviews were conducted in German, to accommodate language preferences.

Two interviews parted from the regular video call format in that they were conducted partly or fully in written form to accommodate the respondents' availability. Curasi (2001) found a potential limitation to this type of interviewing in that they may produce less detailed data, however it may also be more considered than face-to-face interviews as the respondents have time to contemplate their responses. It was concluded that the flexibility in accommodating the respondents and allowing them time to reflect on their answers outweighed potential losses in detail.

Finally, as the study also hoped to identify potential changes from being involved in a complementary currency scheme, recall bias may affect the answers as the respondents might not recollect how their situation was before their use of the currency. Recall bias has been found to limit responses to more positive experiences (Li & Rong, 2023). An experimental design could possibly offset such tendencies, by examining the case before and after the stimuli was introduced (Clark et al., 2021). However, such methods are outside the scope and aim of this study, which does not aim to produce one objective truth but rather illuminate subjective experiences.

5. Analysis

The analysis of the cases is based on the interviews, aiming to identify common narratives regarding how complementary currencies may contribute to a democratic society and economy. This section will delineate three major themes identified in relation to the research questions and discuss them in the frame of radical and economic democracy. The themes were 'money building communities', responding to both research questions, 'money as information', emphasising the contribution to a democratic society, and 'local challenging the global', mainly focusing on the contribution to economic democracy.

5.1 Money building communities

The perhaps most recurring concept to be discussed by the participants is *community*, that the complementary currencies contribute to a creation of an economic as well as social community consisting of the members of the currency. The social community encourages engagement with one another, fostering new relationships, it therefore creates a forum in which one is able to interact with one's local context in new ways according to values such as transparency and solidarity. This contributes to a democratic society through strengthened social cohesion and capital, along with improved opportunities for engagement. The community contributes to economic democracy through mutual support and solidarity as well as improved transparency and accountability; as people and business are brought closer together they become more interdependent and consequently more accountable towards each other. These are important contributions to expanded democracy which will be discussed below.

There is a shared understanding that the motivation to become involved with a complementary currency is mainly due to economic benefits from being a part of the closed economic network, and almost all contended that they had in fact benefited economically from their involvement. The variation mainly depended on the size of the currency, in which the members of smaller circuits still had some trouble to spend the currency. However, despite the economic benefits, many find the social community to be of equal importance, as one member of WIR stated: "I mean for me personally, I'm not just a businessman that uses WIR, this community is also important for me. That's why I am also in a WIR network."

The community contributes to a democratic society and economy in various ways. First, it promotes social integration and inclusion by connecting people around shared values, and may therefore improve social capital, significant for a democratic society. Many respondents agreed that they have made new connections through their use of the complementary currencies, with people who think in similar ways and share similar values. And many did value this social community, explaining that the social community was a vital part of the currency network and that the currency was equally important in supporting the local community, to help improve social cohesion and trust. In fact, one respondent reflected on other alternative currencies proposed by big tech companies such as Facebook and feared that they would not have the same sensibility towards these social aspects. The social contribution of the currency was therefore found in that it encouraged people to make new connections locally, as well as in stimulating social integration of people who may currently lack meaningful employment. To that end, the representative of Chiemgauer explained that one's economic and social existence largely depend on the region in which one lives, and so a stronger local community can improve social capital. By contributing to a community built around shared values, complementary currencies can strengthen social sustainability, through social integration and strengthened social capital (Michel and Hudon, 2015; Degens, 2016; Oliver Sanz, 2016).

Second, the community which fosters social interactions promotes the exchange of ideas and therefore provides a forum for local engagement and deliberation which contributes to a democratic society. As a member of WIR explains:

> I mean it gives you lots of contacts. You have ideas, you know, you don't just talk about WIR. I mean, you get to know people, lots of my friends and family are also in the WIR [network], because entrepreneurs come together.

While deliberative and agonistic radical democrats may have envisioned more or less formal formats through which deliberation and agonism was to take place (Mouffe, 1999; Cohen & Fung, 2004), the importance of forming interests rather than aggregating pre-existing ones is emphasised. A complementary currency community, based around the creation of alternative monetary models, appears an appropriate place to initiate such discussions conducive to forming opinions and changing values. The mutual creation of knowledge and preferences will be further discussed in the next theme 'money as information'. However, with regards to the concept of community, it should be noted that radical democracy aims to increase and deepen political participation (Cohen & Fung, 2004; Lloyd & Little, 2009), and while these currencies make no claim to be overtly political the very formation of a community in which economic and social issues are brought to attention is arguably political. People who may previously not have been very engaged in the local community, now have an opportunity to both reflect upon and affect change through their money and by being included in a social community.

Third, the community fostered solidarity and mutual support as complementary currencies promote reciprocity (Degens, 2016), benefiting both a democratic society and economic democracy through improved opportunities for inclusion. For example, a member of Chiemgauer explained that with a local currency which promotes spending through demurrage, it was easier to give out bonuses to the employees. While not all interviewed acknowledged that their respective currencies would promote solidarity, most felt that it did enable and also encouraged helping each other. Sometimes the supportive nature of the currency only involved giving recommendations, as a member of WIR explains:

> You have this group who works together, you know each other, it's like a big family - a really big family. I have a lot of customers that say, “I want to buy a car with WIR, do you know someone?”, and I say “Of course I know of these three garages”. Sometimes they follow the recommendation, and so you support each other.

The Chiemgauer currency particularly emphasises support to local associations, through a system in which 3% of exchanges are channelled to a local non-profit of the person’s choice. And as the money is paid out in Chiemgauer, it further promotes the local community as the money can only be spent with local businesses. This process of benefiting one’s community and making sure that the money stays there is captured by a member of Chiemgauer:

> 3% goes to associations. [For example], the association where my children played handball. And the handball association receives Chiemgauer and then the association doesn't shop on the internet, the association buys from the local sports shop, and the sports shop also receives publicity. We are all together, and I like that.

The same value of solidarity may be observed in the shared desire of the currencies to issue accessible and interest-free loans, to promote local SMEs. This provides an opportunity for local economic development and inclusion as more people have access to credit. The supportive nature of the community contributes to economic democracy and a democratic society, as means of ensuring more inclusive and equal participation in the economy. Indeed, radical democrats claim that one of the biggest obstacles to democracy is persistent inequalities, producing unequal power relations and subsequent unequal participation (Laclau & Mouffe, 2001 [1985]; Cohen & Fung, 2004). By establishing communities centred around values of mutual support, more may be inclined to become involved and actually have the possibility to be engaged on an equal level.

Fourth, the community contributes to economic democracy as it promotes transparency and accountability between the local businesses and the consumers. It was argued that in a smaller business community, where people know one another, it is easier to influence each other to establish better business practices in contrast to powerful TNCs that lack accountability (Koenig-Archibugi, 2004). To illustrate this disparity; whereas small businesses are dependent on the social relations within their community, big businesses do not share the same dependency and consequently are not equally accountable. Thus, in a small community one must be responsive to people's concerns in a way that larger corporations do not. Members from Chiemgauer and Vix explain this divergence in accountability between small and large businesses:

> I am responsible for what I do, independently. They know me here, so I pay with my name. With a big chain, there can be a meat scandal, there can be a financial scandal, but big business goes on. Nobody is responsible. (Chiemgauer member).

> If you have a local community and a local economic system and someone is putting some bad stuff into the river or is a bad boss, I don't like to do business with people who do this kind of business… I think in a small community, the social system will be, well if you are doing this to people or you put poison into the river, I don't like to do business with you, so it's more transparent. (Vix member).

Building a local community based on a local economic system, may therefore increase transparency by bringing people closer which enables people to make informed decisions about their consumption and their business, possibly encouraging better business practices including human resources and pollution. An economy that promotes transparency, which in turn enables people to make informed choices about what businesses they want to promote, could constitute a more democratic economy, as ‘enlightened understanding’ is a key criterium identified by Dahl (2015). The power of consumers on their society was encapsulated by a member of Chiemgauer when asked how the currency could contribute to democracy: “Certainly in the private decisions of many people, because they have an influence with their purchase.”

Improved transparency and accountability in the economic sphere are also reflective of radical democracy, as many proponents argue that globalised corporate power has negatively affected the same (Wolin, 2017). Promoting local trade thus provides the community with more effective power to hold business accountable beyond the confines of representative government, which is limited concerning economic interventions (Held, 2006). In alignment with radical democracy which seeks to expand political space, the community constitutes a new platform from which citizens may influence their context. Indeed, being able to hold those with an impact on one’s life accountable is at the core of (economic) democracy (Archer, 2002).

However, as much as a currency can help build a community, by promoting social and economic inclusion, it can equally be an exclusionary project. On the one hand, there may be certain requirements to join, such as being affiliated to a SME, or living in a certain geographical area. But other elements of the currency may be further exclusionary, such as only having digital cash or having to agree to shared values, and may therefore only attract certain demographics, as the representative for Bristol Pound argues: “You have to think just like us. You know it's like it's just too exclusive.”. Democratic societies, and processes within those, should ideally be inclusive (Dahl, 2015), and so currencies which create a community which is too narrow may in this regard not be reflective of this idea. Finally, it is worth mentioning that the respondents agreeing to be interviewed are likely relatively more involved in the currency, and so their perception of the community may not be reflective of all member’s perspectives.

5.2 Money as information

There was a shared understanding that there exists a general lack of awareness and knowledge of money, the mechanisms of the financial system, and the impacts thereof. In a democratic society this presents a problem as money is depoliticised, people are not aware of, or have, alternatives and therefore have no possibility to form an opinion and make an informed choice

(Berman & McNamara, 1999; Dahl, 2015). In this regard, the complementary currencies were found to contribute to a democratic society by raising awareness of the monetary system and ways in which to organise it to better reflect the needs of the population, therefore contributing to a politicisation of money. Furthermore, the currencies actively produce new knowledge about the conditions for - and impacts of - monetary design by acting as real-life monetary experiments, which may help inform larger democratic debates. However, there was some disagreement of this impact, and some could not ascribe their interest in monetary issues to the use of their respective currency. This section will discuss both the perception of lacking awareness as well as the possible influence of complementary currencies as conducive to further one's understanding of money and in politicising money as a tool for reaching democratic ends.

The issue of limited knowledge of the economic system, and money in particular, was mentioned by almost all respondents; that people in general find that money is a neutral mechanism of exchange was a widely shared perception. The role of higher education in this lack of financial knowledge was also discussed, in terms of it being limited regarding content about money itself as well as in its suppression of creativity. Creativity was mentioned by several participants as something needed to address the challenges of a rapidly changing world. In addition, the content taught was argued to focus on making people participate in the [neoliberal], mainstream economy in line with Valek (2014) who found that higher education in Europe often excludes teachings on alternative money systems. It appears that the lack of awareness of alternative economics is perceived as a consequence of lacking instruction in schools, even higher education.

The lack of awareness about economics was also discussed in relation to how complementary currencies and their rationales are quite elusive as people generally do not grasp what they are, why they are important, or if they are even legal. In part this was attributed to lack of mainstream media coverage of complementary currencies, as the representative of Bristol Pound explains:

> This area of work is just not understood and it's basically laughed at by all of the mainstream. You know, on the radio every now and then you get positive coverage, but most of the time it's "Oh, funny hippie people doing some funny thing with money".

In the WIR currency, all participants mentioned the bad reputation of the currency, in part due to people not understanding a monetary system which is designed to make people want to spend their money quickly. The representative of WIR explained that WIR received negative press early on: “There were big discussions in Switzerland already in 1936, when the director of the Swiss National Bank at the time, wrote a 100-page book about how bad WIR is and how dangerous WIR is.”

The lack of instruction on and knowledge of alternative economic models constitute an issue in a democratic society which requires ‘enlightened understanding’ of issues of political concern to enable effective debate and participation (Dahl, 2015). In particular for radical democrats who acknowledge that preferences are formed (Lloyd & Little, 2009), and so the lack of available knowledge on alternatives precludes the possibility to engage in a process of forming opinions. By rendering money into a de-politicised issue, in which alternatives are not taught and which mainstream media commonly dismisses as peripheral ideas, it is near impossible to form an opinion regarding monetary design and even harder to democratically engage with it through debate.

All currencies therefore contribute to a democratic society by providing economic education of monetary systems, it was particularly significant for Vix and Chiemgauer who organise presentations and visits to schools. In WIR, it was mentioned that education was conducted within the community but argued that it was too hard to do it publicly as the mainstream media portrayals were too ingrained. While Bristol Pound is now discontinued, the representative argued for the importance of continuing to share knowledge and support other complementary currency schemes, something mirrored by the representative from Chiemgauer:

> We have already serviced other regional currencies. If someone now wants to found a new regional currency, you have to know quite a lot and can also make quite a few mistakes. Not everyone has to reinvent the wheel and make all the mistakes that we have made, but someone can benefit from our knowledge.

However, not all efforts to educate need overt measures such as lectures; the very nature of an alternative currency can come with information. A member of Chiemgauer spoke about this characteristic of money, that by simply paying with the complementary currency you make people reflect upon money, what money is and how it works:

> They say money makes the world go round, [but] you don't think about it. And the Chiemgauer makes you think. For example, that money is made by man and not by God, or that is not like air and water. That is, we can make the rules of the game, that suddenly becomes clear.

As complementary currencies provide an alternative, they open up the possibility to critically reflect on one’s own perceptions and preferences, thus contributing to a politicisation of money. Indeed, the core of democracy, and politics, is rendering issues of social concern into political issues which can be debated on. The complementary currencies therefore put money on the agenda (Dahl, 2015). The way that the currencies politicises money, by promoting reflection and discussions, provides people with the ability to identify their preferences, a crucial part of the democratic process (Lloyd & Little, 2009). Another aspect which was mentioned is how the use of the complementary currency often seemed to initiate conversations. This type of conversation is an opportunity to clarify one’s opinions, hone one’s arguments, and consider possible counterarguments, vital elements for deliberative democrats (Cohen & Fung, 2005). The promotion of monetary awareness of these currencies therefore contributes to a democratic debate about what money is and how it may be constructed differently through the introduction of alternatives. But it also presents the user with a choice to act according to new-found preferences; the currency is not a theoretical construct but actual practice. As such the currencies contribute, not only to improving information on money, but also to the opportunity to then make a free and informed choice. In a way, this creates a new space for political influence. According to radical democrats, introducing new spaces for influence is essential (Conway & Singh, 2011), and so the possibility to act according to one’s conviction with the use of particular money is contributing to a democratic society.

However, when asking if the members had learnt more about the economic system or about monetary design through their participation in the currency, the answers varied. Some focused more on the effort and knowledge required to reconcile their personal finances when dealing with two types of currencies and others were unsure if they had learnt more through using the currency or rather from having an active interest in alternative economics. Thus, while the respondents shared a substantial understanding of the challenges of the mainstream monetary system, their knowledge cannot be directly attributed to their use of the complementary currency. This may also be due to many respondents having been members for a long time, making it difficult to gauge how their knowledge may have increased from their membership. However, to join the currency would require an awareness and appreciation of the aims of the currencies, as a member of Vix explains regarding the involvement of idealistic, individual members:

> It’s an effort you have to make because there is not a direct, not a clear direct profit [from using Vix], only for companies but for private persons it's a little bit difficult, and that means that you are thinking about these things.

However, the currencies may not only contribute to member’s economic knowledge, they also actively produce new knowledge about monetary alternatives which contributes to a democratic society through more informed debates. In relation to creativity, complementary currencies can be viewed as socio-economic innovations, as real-life experiments (Gelleri, 2022), in which new forms of money systems may be tested. Together, they create new knowledge of how alternative forms of money work in practice, what conditions they require, and what their consequences are. Deliberative democrats in particular emphasise the importance of mutually created knowledge, trying out new solutions and deliberating on the effects thereof (Cohen & Fung, 2004), and complementary currencies provide the opportunity to do exactly this. As such, they can contribute to wider discussions about the mechanisms of monetary design through the provision of evidence on which arguments may be raised. By participating in a complementary currency, a person may therefore not only affect change within their communities but also contribute to wider knowledge of how the economic system could be organised.

5.3 Local challenging the global

A final prominent theme particularly relating to economic democracy is how a complementary currency can act as a barrier to globalisation, in which money flows unevenly from some regions to others (Pacione, 1997), which was described by the respondents as negatively affecting diversity, democracy, and equality. They do so by empowering the local economic community, and by keeping economic power in the region it was found that the economic system would be more reflective of local needs. Their contribution to economic democracy was therefore identified as; balancing economic power, thus supporting opportunities for equal participation in the economy; providing the local population with an opportunity to develop their circumstances according to local needs through a currency reflective of the same; maintaining diversity and promoting pluralism in the economic and monetary system; and providing new policy options to stimulate local economic activity. This section will begin by discussing some issues identified with globalisation and transnational corporations, and elaborate on the ways complementary currencies can counteract those problems and in turn contribute to a more democratic economy.

The issue with global money was identified by several participants in that money is generally leaving many regions, concentrating in, for example, Silicon Valley. The flow of money globally produces inequality (UNCTAD, 2017; Gravina & Lanzafame, 2021), as it flows to regions offering the highest return (Pacione, 1997). That was among the reasons why people got involved, as a member of Chiemgauer attests to: "As retailers, we always have the problem that too much economic power is draining from the region and that was one of the reasons why I got involved more.". Many respondents spoke about how internet purchases have become more common and how that is negatively affecting local economic activity as money was leaving. Furthermore, digital payment systems apply fees which again act to direct money away from local interests, as the representative of Chiemgauer explains: "If I pay a businessman with PayPal, he gets a deduction from PayPal for the service that PayPal performs. And that goes to PayPal and makes some people very rich."

Complementary currencies therefore contribute to economic democracy as they balance economic power between TNCs and SMEs, promoting more equal participation in the economy. This is achieved by the currencies' increased circulation in a region before disappearing (Groppa, 2013), and the higher velocity due to design mechanisms, such as low or no interest rates, which encourages spending (De La Rosa & Stodder, 2015). These mechanisms are similarly found in the currencies studied here, and respondents spoke positively about their effects on local economic activities. Almost every interview subject further discussed interest in negative terms, as contributing to hoarding and uneven distribution and outflow of money. The complementary currencies that do not apply interest to either credit or debit, as such contribute to more spending, benefiting local business, and to a more equal distribution of profit as interest payments no longer benefit few on behalf of the majority (Kennedy, 2010). A member of Vix discussed this effect of interest rates in relation to historical, religious practices:

> I think in Islam and Christianity, asking for interest [is discouraged]. In Islam it still is and Christianity lost it a few centuries ago. That's not for nothing. That wisdom came over the centuries, that making money with money is a bad thing. And I think making money with money is stealing money from the people, from the real economy, and maybe that is stealing from the poorest.

Overall, there was a consensus that complementary currencies can challenge global redistribution of money from interest and transaction fees and market capture of large corporations through the promotion of local businesses involved in the currency network. Of course, as some mentioned, one can still buy from local businesses using fiat money, but by paying with a geographically bound currency, one knows that the money will again be used within the local economy. A local monetary system may therefore contribute to economic democracy by counteracting elements of globalisation which tends to (re)produce inequalities, leading to unequal opportunities to participate in the economy (Pacione, 1997). In line with Johanisova and Wolf's (2012) definition of economic democracy, the local money helps balance economic power between local SMEs and global TNCs. As such, it increases the economic power of communities which are otherwise at a disadvantage as money outflows are greater than inflows.

Another contribution to a democratic society and economy was the complementary currencies' promotion of regional diversity as the currencies are more reflective of the needs of the local population. First, the complementary currencies were identified to promote local culture, for example through Chiemgauer's donations to local associations, which helps maintain cultural diversity in a globalised world. Second, by keeping economic power in the region, through a complementary currency, it was found that the economic system would be better tailored to local needs, again contributing to the maintenance of regional diversity. The representative of Chiemgauer and a member of Vix both allude to this principle:

> A regional currency ideally is issued democratically and benevolent by the people in a certain region and is designed to reflect the needs, social and economic characteristics of the individual region. (Chiemgauer representative)

> And the local currency is adapted to the local situation. (Vix member)

Indeed, complementary currencies are developed according to local needs, which is why they vary based on context. WIR was created to mitigate lack of liquidity to help SMEs while Chiemgauer had an early focus on supporting local businesses and associations, and the currencies therefore differ in their design. By creating a local currency, the opportunity is given to make sure that it will be better tailored to that context, and in many cases this is done with the overt aim to offset the impact of global money to promote regional diversity. In relation to radical democracy, local decision-making power beyond national, representative government is essential to ensure improved self-government (Lloyd & Little, 2009; Conway & Singh, 2011). Thus, while the governance of the currencies differ, they share that power over the economic system is kept locally which contributes to democracy as people are more aware of their local situation (Esteva & Prakash, 2014) and so local concerns are better reflected by the more accountable local institutions (Conway & Singh, 2011).

On the other hand, as we live in a global world, with a global economy, where many issues cannot be decided at the local level including climate change mitigation and international trade, some radical democrats also envision improved supranational democratic governance (Mouffe, 2002). Indeed, some respondents spoke about the challenges that democratic governments face as their policy options are limited due to global trade and its impacts on society, as captured by a member of Vix:

> Neoliberalism hinders them from doing anything, because that's the rules… So if you're talking about democratic deficits, I think neoliberalism and [forced] competition, creates a big democratic deficit since the government may not be a part of the market. They have stepped back and nobody sees that… So we are not living in a democratic country anymore.

In contrast, complementary currencies introduce opportunities to create interventions in the economy which would not be possible within the global market which has significant implications for economic democracy. By creating their own rules by which the money is functioning, they can direct money flows to what the community finds to be important, such as local associations and businesses with better practices. The system therefore enables broader policy options within the economic sphere. In the frame of agonistic radical democracy, the creation of a new monetary system thus nurtures pluralism in the global economic system by partly disconnecting it from mechanisms and regulations which favours capital to move in uneven ways, concentrating in TNCs (Hines, 2013). Pluralism is fostered by being able to cultivate local practices, without being entirely disconnected from the global economy which is likely not possible nor desirable. As such, all currencies except WIR enabled conversion, and many members still import products from outside the local context. The currencies therefore illustrate how the 'us/them demarcation' (Mouffe, 1999) can be framed in the economic sphere through the interaction between a complementary currency, with its own rules and aims, and global markets that function in a way allowing for pluralism. Indeed, local money does not preclude other forms of fiat money, they are parallel currencies and do not aim to replace but add on. What is interesting is that they provide alternatives which can be reflective of local needs in a way which global money is not. On this note many respondents spoke about how the complementary currency provided an opportunity to reflect on the impact of their purchases and consequently have an influence over money flows through their consumption.

The new opportunities to intervene in the economic sphere through a complementary currency may also extend to local government. All currencies studied except WIR have enjoyed support from local government; Bristol Pound could be used to pay local taxes, local government have an account with Vix, and the Chiemgauer currency was used to pay out benefits for climate-friendly actions, such as to install photovoltaic systems. Many respondents also discussed the importance of governmental support for the success of the currencies, for example to provide legitimacy to the scheme. However, the involvement of local government also emphasises the opportunity of using complementary currencies as a policy choice to impact the local society and business environment. By implementing an intervention in a complementary currency, local governments can expect further benefits to the local community as the money will circulate within the community more times. However, it should be noted that there are still limitations to the involvement of governments, as for instance public procurement in the EU must follow open procedures (EU, 2014) and therefore cannot be conducted in a complementary currency to aim to localise such services.

Yet, the impact of complementary currencies on their local society and the economy should not be overstated. Most of the currencies are still small and the effect of their turnover is reflective of this. Even WIR, with its 24,000 members, does not represent a large share of Swiss SMEs. Furthermore, this study does not investigate the actual impact that complementary currencies have on localisation and as such cannot make any inferences regarding the scope of this impact. The contributions described here should rather be interpreted as potential ways in which alternative currencies can contribute to democracy, which may manifest more or less in certain schemes.

6. Discussion

This study explored commonalities in different complementary currencies' potential contributions to a democratic society and economy. The findings illustrated how the complementary currencies' creation of a community promoted social capital and engagement, how raising awareness of the economic system contributes to a politicisation of money, and how a strengthening of local economic power promotes regional diversity. In developing a sustainable society, characterised by equality, decent work, sustainable consumption and management of environmental resources, in line with Agenda 2030 (UN General Assembly, 2015), these contributions to a democratisation of the economy could constitute important elements. The contributions will be discussed more in depth below in relation to the research questions and previous research.

6.1 In what ways can complementary currencies contribute to a democratic society?

A democratic society should be characterised by an informed and engaged citizenry with autonomy to form their society according to democratic principles (Dahl, 2015). The complementary currencies contributed to this in a variety of ways, by generating a social community and by politicising money.

Previous research on complementary currencies, from a local currency in the USA (Lepofsky, 2009), currencies in Spain (Oliver Sanz, 2016), to a global systematic review (Michel & Hudon, 2015), have found that they contribute to social integration and social capital. Similarly, the currencies studied here shared that the economic communities created social communities, enabling new relationships and mutual support, which builds transparency and trust. As such they promote social capital in a global system which erodes the same (Lietaer et al., 2012). In contrast to the other studies, this study emphasises that these are important conditions for a democratic process and society, in line with the study by Dini & Kioupkiolis (2019).

The community may also be further reflective of radical democratic ideals in that it creates spaces in which citizens can engage with their society and each other in new ways. Both deliberative and agonistic democracy champion discussion, be it to reach consensus or to accentuate plural views (Cohen & Fung, 2004; Laclau & Mouffe, 2001 [1985]). The communities themselves may be further reflective of radical democracy, as they provide a platform to participate in a practical way. These communities are also conducive in cultivating preferences, which are further conceptualised through discussion, and may then represent a challenge outside of their community. This is enabled by a politicisation of money's role in society, driven by the creation of an alternative coupled with deliberate efforts to educate and initiative reflection on money.

Furthermore, they are actively producing more knowledge by testing, evaluating, and improving innovative solutions in a real-life setting. This is a good instrument to provide information for citizens to develop an informed understanding about possible and functioning alternatives in their economy, something which is currently not commonly taught (Valek, 2014). This effect mirrors the findings of Eskelinen and van der Wekken's (2021) study of a Finish timebank which emphasised its contribution to collective learning. From the perspective of radical democracy, the process of reflection, deliberation, and formation of preferences that these currencies produce could constitute an act of democratic participation. This production and dissemination of knowledge can therefore contribute to a broader informed debate, and also provide new tools to promote local development which could be endorsed by governments, who lack such options due to global trade and investment rules (Held, 2006). Furthermore, while the communities promote deliberation, they do so through action. Not unlike Bazzani's (2020) study of the Sardex, in which the participants found the currency to constitute a form of collective action, these currencies pursue politics in a practical way by introducing an alternative way in which to engage with one's society.

However, the interpretation of these findings should consider that they are based on subjective experiences. While most respondents appreciated the social community, they may be biassed, and the community could be exclusionary and not able to attract people who do not share the same values, limiting its impact on society at large. Furthermore, the educational impacts for the members were inconclusive, and so simply introducing alternatives may not have the substantive improvement on general monetary knowledge that a democratic society requires for an 'enlightened understanding' and 'control of the agenda' (Dahl, 2015). Yet, the findings imply that the implementation of complementary currency schemes have potential to contribute to a democratic society along the identified dimensions which could be further investigated in future research to establish their impacts through a larger sample.

6.2 In what ways can complementary currencies contribute to economic democracy?

Economic democracy emphasises a decentralisation of economic power and equal opportunities to participate in the economy (Johanisova & Wolf, 2012). The complementary currencies were found to contribute to this by counteracting some of the negative impacts of globalisation while promoting increased transparency and accountability.

The current economic system which renders financial actors from all over the globe more interconnected has benefits, but globalisation also contributes to a concentration of wealth and power (IPCC, 2021), limiting governments and accountability (Koenig-Archibugi, 2004). A local economic community was envisioned to strengthen local culture and economic power, in line with studies which have emphasised the improved economic opportunities from higher velocity and spending multipliers of complementary currencies (Groppa, 2013; De La Rosa & Stodder, 2015). That means that purchasing power is kept locally, and this partial shift in economic power to the local community means that they have better resources to shape their community according to their needs, and to fashion their money to reflect the same.

This shift in power over the economy may make the economy more democratised. In the current global market, large corporations are favoured, they have many advantages over small, local businesses, for one in access to credit. But a complementary currency which promotes local SMEs through accessible loans and encouraging local spending and reciprocity, ascertaining that money stays in the region, balances out some of the power of the global corporations. Which reflects the findings of Dini & Kioupkiolis (2019), who identified the Sardex challenge to unequal financial power to be its main democratising contribution. As economic power is shared, the ability to participate in the economy on more equal terms is arguably improved, and therefore made more democratic.

Furthermore, the lack of accountability in the economic sector has been described as an issue in a democratic society as the unequal distribution of power within the economic sector between SMEs and TNCs (Koenig-Archibugi, 2004; IPCC, 2017), coupled with limited governmental policy choices (Held, 2006), limits autonomy. However, the interdependency between local business and consumers along with improved transparency through interpersonal relationships, render businesses to be more accountable towards their customers. In accordance with radical democracy, which finds that representative government is insufficient to ensure democracy, this process of building accountability towards economic agents therefore represents a tool to democratise the economy beyond the possibilities awarded to governments.

However, this study did not investigate the actual impact that complementary currencies have on localising trade. Other studies which have attempted to do so have found inconclusive evidence (Ruddick, 2011; Marshall & O'Neill, 2018). Thus, while complementary currencies have the potential to promote democracy through a localisation of economic power, global value chains and the currencies' often small scale may limit such impacts. Furthermore, these currencies present challenges, as many respondents agreed that they require more effort, may have higher prices, and the lack of diversity among businesses accepting the currencies limits places to spend one's money. The implementation and success of complementary currencies therefore requires substantive engagement from the local population. In line with radical democracy's lack of a blueprint, there is likely not one universally applicable model of a complementary currency, but it should be adapted to the local context. The effective implementation of complementary currency schemes to promote democracy would benefit from further research building on the findings of this study by exploring the interconnection between the design of the currency and its social, political, and economic context, to examine how the identified potential contributions to democracy may best be realised.

7. Conclusion

This thesis has discussed how complementary currencies may contribute to democracy, not in that they are all governed democratically, but in the ways that they may contribute to a democratic society and economy through a focus on money flows.

This research has identified that the creation of an alternative money system produces particular benefits for its members; in the creation of an economic and social community characterised by trust, transparency, accountability, and mutual support and interdependence; in the promotion of reflection, deliberation, and the production and distribution of knowledge; and in protecting local interests and diversity in a global economy. These benefits can contribute to a democratic society and economy in several ways. By keeping economic power locally, some of the inequalities produced by the global economic system may be offset, while making sure that the system functions in a transparent and accountable way according to local needs. It also puts emphasis on the local community, encouraging participation and reflection within the community, thus making the participants take a more active interest in the construction of their local circumstances. Finally, through raising awareness about money through the creation of a choice, it politicises money creation thus contributing to a democratic society of plural views and open debate.

With the mounting challenges that democracies face today, including financial, ecological, and social, the search for new systems in which to organise our society and economy in line with democratic values is imperative. To achieve the sustainable and democratic world envisioned in Agenda 2030, this study has illustrated that more attention should be paid to money to find new opportunities for development. While this study has identified common perceptions of the complementary currencies' potential to contribute to a more democratic society and economy, the findings only reflect the perspectives of a few people involved in four complementary currency schemes, and so further research is required to establish actual impacts to quantitatively verify these claims. Future research would do well to continue to explore the relationships between money and democracy more specifically along the identified dimensions, and to contrast design elements and the situational context of different currencies to their democratic influence on the local economy and society.

Our earliest ancestors finally did manage to develop a technology based on fire. But they had to emerge from the ocean to do it. Our descendants will no doubt develop a technology based on sustainability. But they will have to emerge from the current financial system to do it.

– Dennis Meadows, foreword to *Money and Sustainability* (Lietaer et al., 2012, p. 12).

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Appendices

Appendix 1 - Interview guide for representatives and members

Interview guide representatives

About the currency

i) Can you briefly describe X-currency and what your role is?

ii) What got you interested in complementary currencies?

iii) What have you learned or gained from being involved in a complementary currency?

iv) What do you believe are some of the benefits and challenges of complementary currencies?

v) Why do you think people get involved and use complementary currencies?

Topic of Democracy

vi) Do you believe that complementary currencies, and X-currency in particular, can contribute to democracy and/or democratic values? If so, how?

- Values commonly associated with democracy: liberty, participation, pluralism, free choice, civil society, equality.

vii) Do you find complementary currencies, and X-currency in particular, contribute to civic education by raising awareness of money and the monetary system? If so, how?

viii) Do you find that complementary currencies contribute to the right of citizens to participate in the economy? If so, how?

ix) Do you find that complementary currencies contribute to a decentralisation of economic power, away from central banks and large commercial banks? If so, how?

Would you like to add anything?

Interview guide for members

Currency usage

i) In what way are you involved with X-currency?

ii) Why did you decide to become involved with X-currency?

iii) What have you experienced are some of the benefits and challenges of using X-currency?

iv) Have you changed your behaviour in any way since starting to use X-currency?

v) Have you learned anything new since starting to use X-currency?

Topic of democracy

vi) Do you believe that using X currency contributes to democracy and/or democratic values? If so, how?

- For example, liberty, participation, pluralism, free choice, civil society, equality.

vii) Do you think it promotes other values?

- For example, solidarity, localisation.

viii) Have you learnt more about money and monetary design through the use of this currency? If so, what/how?

ix) Have you been able to participate differently in the economy due to using X-currency? If so, how?

- For example, have you found it easier to access credit or gained more customers than previously?

x) What are your thoughts on having actors aside from the central bank and commercial banks that can issue money?

Would you like to add anything?

Appendix 2 - Consent form template

Informed consent for Study on Complementary Currencies and Democracy[1]

This form is to be filled in by participants in the above study, indicating that they have received information about the study and voluntarily consent to participate in the same. Participation is voluntary and consent may be withdrawn at any time.

Information about the study
The master-level study, carried out at Lund University, will research complementary currencies from a perspective of democracy. The study is led by Lisa Fredriksson and supervised by Prince Young Aboagye. Data collection will be conducted through interviews with people involved with complementary currencies, either as representatives or as members. The interviews will be digitally recorded, and the interviewer will take notes. Both notes and recordings will remain confidential. Your personal identity will remain anonymous. No views will be directly attributed to you in any document that may be produced from the interviews. The name of the complementary currency to which you are affiliated may however be known in the report unless you explicitly indicate otherwise. The collected data will only be used for research purposes.

Do not hesitate to ask questions about the study or the uses of the collected data. Contact Lisa Fredriksson, +46 733 32 72 62, lisa.fredriksson@hotmail.se, for any inquiries.

(1/2)

[1] The consent form is adapted from its original digital format for the purpose of presentation but includes the exact information and statements which were provided to the respondents.

Consent form to be filled out by the participant

Your name and today's date

____

I have read and understood the information about the study. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	Yes ▢ No ▢
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	Yes ▢ No ▢
I understand that taking part in the study involves participating in a recorded [online] interview.	Yes ▢ No ▢
I understand that information I provide will only be used for research purposes.	Yes ▢ No ▢
I understand that information which could be used to identify me, such as my name, will not be shared beyond the researcher.	Yes ▢ No ▢
I agree that the information I provide in the interview may be quoted in research outputs.	Yes ▢ No ▢
I agree that the complementary currency to which I am affiliated, may be named in the report.	Yes ▢ No ▢

(2/2)