Community currencies in The Netherlands: overview and potential

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Summary

In this study, two questions are answered. First, an overview of community currencies in the Netherlands is given. This overview shows that there are 100 different community currencies in the Netherlands, of which the majority of currencies are of the mutual exchange type (85), followed by the local currency type (8) and service credits type currencies (7). There are no barters markets in the Netherlands. The largest part of the currencies is situated in urban areas (67), followed by rural areas (29) and nationwide currencies (4). The number of users of the currencies ranges from around 15 to 1000 users, and most currencies have economic or social objectives. Most currencies are instigated in the last five years and no currencies from before 1993 still exist (excluding LETS). Most currencies are connected to local businesses, yet very few are connected to banks, local public bodies or the third sector.

Second, three community currencies from the Netherlands are examined to provide information on the potential of those currencies to have beneficial impacts. This potential is examined by using an adapted framework from Graugaard (2012) and by looking at the number of users. The currencies selected for the case studies are Utrechtse Euro, Timebank.cc and United Economy. Analysis showed that all currencies have shown positive impacts in their network, although the focus of the impacts differs per currency. Indicators on which all currencies score similar are localization of the economy, shifting of consumption patterns and building a community. Impacts differ on the raising of awareness, the strengthening of the local identity and increased sustainable consumption. The barriers that the currencies face are also examined and also differ per currency, ranging from difficulties in keeping the currency flowing to attracting new and diverse participants. Combining these impacts and barriers with the number of users and the growth of that number, it was concluded that all currencies have potential, yet Timebank.cc shows the greatest potential, followed by Utrechtse Euro and United Economy.

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Introduction

Society has used money for millennia, with the first coins being minted centuries before Christ. In all its forms and functions it has provided humankind with many advantages and facilitated great progress. Although globally relied upon, the current monetary and financial system is built upon economic growth and is never uncontested (Daly, 1996; Victor & Rosenbluth, 2007). Therefore, there have been alternatives to conventional money that have not replaced it, but have been complementary to it. In recent times, these alternatives have often been introduced to be more environmentally, socially or economically sustainable than conventional money. These alternatives are mostly, but not exclusively, bottom-up in the sense that they are instigated from civil society. They are introduced to bolster the local economy or to pursue social or environmental goals, such as increasing social inclusion or to increase the separation rate of waste (Seyfang & Longhurst, 2013).

These alternatives are intended to fulfill goals that conventional money cannot fulfill. Due to their grassroots, bottom up nature, they have a local form and are rooted in communities. Therefore, such alternative currencies in all the diverse forms can be summed up using the term 'community currencies' (Seyfang & Longhurst, 2013). Community currencies encompass a wide range of currencies with diverse objectives and characteristics. The first community currencies similar to current forms, were *local exchange trading schemes* (LETS), introduced by Michael Linton in 1986 (Seyfang, 2004). LETS are one of the most well-known and widespread forms of community currencies and are systems through which members of a community can exchange goods and services where transactions and balances are recorded in a central place visible to all members. Another well-known form of community currencies are *Time banks*. Time banks are systems in which time is the central unit of value and where all hours worked are worth the same, regardless of the work that is performed or by whom. Time Banks are often intended to value work that the mainstream economy does not value. There are also other forms of community currencies, for example local currencies, which are currencies that can only be spent by locals at local businesses. This form is primarily intended to bolster the local economy by stimulating the circulation of money within the region. One of the best known examples is the Bristol Pound in the U.K., with around £700.000 worth of Bristol Pounds in circulation in 2015 (The Guardian, 2015). Such community currencies show potential for a wide range of goals, from the relocalization of the economy to the giving of value to informal housework done by household caretakers.

To date, there has been some research done towards community currencies and their impacts. Seyfang (2006) found that certain currencies created new institutions founded on new green and social ideals in their regarding community. Also, they exist alongside national currencies, showing the possibility of plurality with regard to monetary systems. Seyfang argued that community currencies can be a useful tool for both policymakers as well as communities in order to promote sustainability (Joachain & Klopfert, 2012). Graugaard found the *Lewes Pound* having changed consumption behaviour and developed new social interactions, and his findings suggest that community currencies can increase social-ecological resilience in communities (Graugaard, 2012). Seyfang and Longhurst showed that community currencies can stimulate sustainable development (Seyfang & Longhurst, 2013). However, it is often the social and

economic benefits that are the main goal of community currencies. Bowring found that, indeed, certain time-based currencies can have significant potential when introduced in low-income neighbourhoods where unemployment is prevalent (Bowring, 1998). The basic unit of value of this currency is time, of which the unemployed have plenty. Apart from these advantages, community currencies can also be the manifestation of anti-globalization feelings, as a form of challenging the economic status quo in which growth is central (North, 2005). Thus, community currencies can provide many opportunities for social, environmental and economic benefits.

Seyfang and Longhurst have mapped nationally-based currency groupings in the Netherlands, which provided a partial overview of existing currencies (Seyfang & Longhurst, 2013). The overview made by Seyfang and Longhurst mostly covers currencies outside the Netherlands. For the Netherlands, Seyfang and Longhurst only covered the nationally-based *LETSkringen*, which is only one variety of community currencies. Apart from this national grouping, few other case studies of Dutch initiatives are available. There are case studies which cover the already ceased *NU kaart*, a currency created by the municipality of Rotterdam intended to promote environmental sustainability (Joachain & Klopfert, 2012). Next to that, there is a study on *Makkie* and *TradeQoin*, both Dutch (Bindewald, Martin, & McCann, 2015). In sum, two research gaps can be identified. First, there is no overview of community currencies in the Netherlands, so currently it is unknown how many community currencies exist in the Netherlands and what characteristics they have. Secondly, there are very few case studies of still existing Dutch community currencies, which makes it nearly impossible to gain insight into the potential of community currencies in the Netherlands to have beneficial impact on society.

This study will fill both knowledge gaps mentioned above, by answering the question 'What community currencies exist in the Netherlands and what is their potential?' To answer this question, a division into sub questions is made, which gives the following questions.

1) Which community currencies exist in the Netherlands?
2) What are the characteristics of these currencies?
3) What impact do these currencies have?
4) Which barriers do these currencies face?
5) What is the potential of community currencies?

By answering the main question through these sub questions, this study will provide an overview of community currencies in the Netherlands and characterize them, which will be done in the first part of the results section and will answer sub questions 1 and 2. In the second part of the results, three case studies will follow in which a detailed description of the currencies will be given, what impact they have, which barriers they face and what their potential is, answering sub questions 3, 4 and 5. In the last part, the potential for benefits of community currencies in the Netherlands in general will be discussed, based on findings in the first two parts.

Conceptual framework

Community currencies

Community currencies are currencies that arose to complement conventional money, to fulfill other goals and which run parallel to the ruling currency (Seyfang & Longhurst, 2013). What makes community currencies unique is the fact that they are inherently locally-based and serve specific communities which have a limited geographical or ideological range (Collom, Lasker, & Kyriacou, 2012). Blanc adds to this definition that community currencies serve primarily a community purpose (Blanc, 2011). However, what Blanc describes as community currencies differs from what Seyfang and Longhurst (2013) state, as Blanc emphasizes community currencies as being primarily economic. Such currencies will also be categorized as community currencies, provided that they do not solely serve commercial goals, as air miles would. Therefore, in this study, community currencies are defined as an alternative form of money instigated as a response to a failure of conventional money, which often has wider objectives than simple economic functions (Ozanne, 2010; Seyfang, 2004).

Characterizing currencies

Such community currencies are further differentiated into four types, as follows from Seyfang and Longhurst (2013). The first type is *service credits*, of which time banks are the prime example. In this type of community currency, the time-based value unit plays a fundamental role. In this concept participants earn credits for every hour spent helping someone and every hour spent is equal, regardless of the activity performed. Often, such currencies are based on first performing work to earn credits, rather than creating credits to purchase services. This can mean that growth is slow in the first period, but it is often part of the ideals that the credits are based on real actions instead of being created from nothing. The second type is the *mutual exchange*. Such a currency is based on the amount of debit and credit to the system always adding up to zero. Every credit spent always equals another's debit, which is all centrally recorded. The currency is created by spending it, as a seller earns money because the buyer is in debt, essentially providing interest-free credit. The third type is the *local currency*, a paper-based currency that has a limited geographical range. It can be intended to create a system which reinforces the local economy by increasing the local economic multiplier or to reinforce the local identity. Local currencies are initially paper-based, but it is argued that a currency can be of the local currency type if it is digital as well, as such technology has become easier to use and more accessible. *Barter markets* is the fourth type and is a combination of the second and third type. Participants are supplied with some local currency, which they can then spend in regular occurring markets. The issued local currency is not convertible to conventional currency.

Apart from distinguishing the four different types of community currencies, the currencies differ on other characteristics as well. To further characterize currencies, it is also important to consider the year of founding including the actor that instigated the currency (Seyfang & Longhurst, 2016). These two factors show who took the lead in the forming of the currency,

what kind of actor this is and when this happened. Next to this, the objective of the currency is relevant, as this is linked to the impacts. Furthermore, the place of the currency is also relevant.

Fare and Ahmed (2017) also characterized community currencies based on the actors the network of the currency consists of. There are currencies which are instigated by local public bodies to complement public policies. For example, these currencies are implemented as being a rewarding system for certain desired behaviour, such as the separation of waste. Next to this, community currencies can be related to banks, which is something that rarely is the case, yet would be a relevant feature, as this would influence the image of the currency. Thirdly, currencies can be connected to local businesses, which is often the case, as many currencies are created to support the local economy. Lastly, currencies can be connected to the third sector. This can be convenient as community currencies and third sector organizations often have similar objectives, such as social and environmental goals, for which community currencies and the third sector can work together. Examining these connections can shed light on the way the currency functions and through which collaborations the creators intend to reach the objectives. Also, it distinguishes top-down and bottom-up or civil society initiatives, as currencies connected to local public policies are often top-down governance tools. This is relevant as the connections of a currency can have influence on the potential of the currency to have impact.

The characteristics that were examined for the currencies are shown in Table 1, along with their sources. Apart from the characteristics drawn from literature, the number of users is added to the characteristics, as this is relevant for estimating potential, which will be elaborated on more in the coming paragraph.

Characteristic	Description	Retrieved from:
Name	The name of the currency.	
Number of users	The number of users of the currency, both consumers, businesses, third sector and public bodies.	
Place	The geographical area the currency is centred around.	Seyfang and Longhurst (2015)
Year founded	The year in which the currency was created.	Seyfang and Longhurst (2015)
Instigator	The key actor that took the lead in creating the currency.	Seyfang and Longhurst (2015)
Objectives	The goals which the currency is intended to strive for.	Seyfang and Longhurst (2015)
Currency type	Service credits, mutual exchange, local currency or barter markets.	Seyfang and Longhurst (2015), Seyfang (2013)
Connection with:		
Banks	Is the currency connected to a bank and if so, how?	Fare and Ahmed (2017)
Local businesses	Is the currency connected to local businesses and if so, how?	Fare and Ahmed (2017)
Third sector	Is the currency connected to the third sector and if so, how?	Fare and Ahmed (2017)
Local public policies	Is the currency connected to local public policies and if so, how?	Fare and Ahmed (2017)

Table 1 Characteristics of the community currencies that are investigated and mapped

Potential

The potential of a community currency is the extent to which the currency can have economic, social or environmental effects that are seen as beneficial. It is argued that potential can be separated into two elements. The first part is effectivity, or the extent to which the currency causes impacts. This effectivity can be evaluated using a set of indicators that cover a wide range of impacts. These indicators were organized in a framework by Graugaard (2012), who created it

to examine the impacts of the Lewes Pound and is therefore well suited to be used for community currencies and will be used to examine community currencies in the Netherlands. The framework covers a wide range of indicators, including economic, social and environmental aspects. Due to the nature of the framework as being used to evaluate impacts of community currencies and the wide range of indicators on different aspects, it is argued that this framework is relevant and well suited to examine the effectivity of the currencies studied. The framework of indicators along with the questions to evaluate the regarding indicator are shown in Table 2.

Indicator	Question
Economic	
Localization	In what ways does the currency facilitate localization of goods and services?
Infrastructure	Does the currency create new infrastructure for the provision of goods and services?
Uses	Does the currency encourage new uses of money?
Changing consumption	Is the currency affecting the consumption patterns of its users?
Social	
Community building	How does the currency strengthen the local community?
Awareness raising	Does use of the currency contribute to enhanced awareness?
Values and attitudes	What are the effects of the currency on the values and attitudes of its users?
Local identity	Does the currency strengthen local identity?
Well-being	Does using the currency bring benefits in terms of well-being?
Function	What are the main obstacles for diffusing the use of the currency?
Environmental	
Ecological footprint	How does the currency affect the ecological footprint of currency overall?
Sustainable consumption	Does the currency shift consumption patterns in the direction of sustainability?
Environmental side-effects	Are there any unforeseen environmental benefits from using the currency?

Table 2. Indicators for the evaluation of the potential of community currencies, based on Graugaard (2012)

A second element of effectivity is the number of users of the currency. The goal of a community currency is in a vast majority of the cases to create some form of change, which requires users of

the currency, making the number of users relevant for its effectivity. The relation between the number of users, the effectivity and the potential is visualized in Figure 1 below. As described before, it can be seen that the number of users of a currency has a positive effect on the effectivity of a currency, which translates into a higher potential of the currency to have benefits.

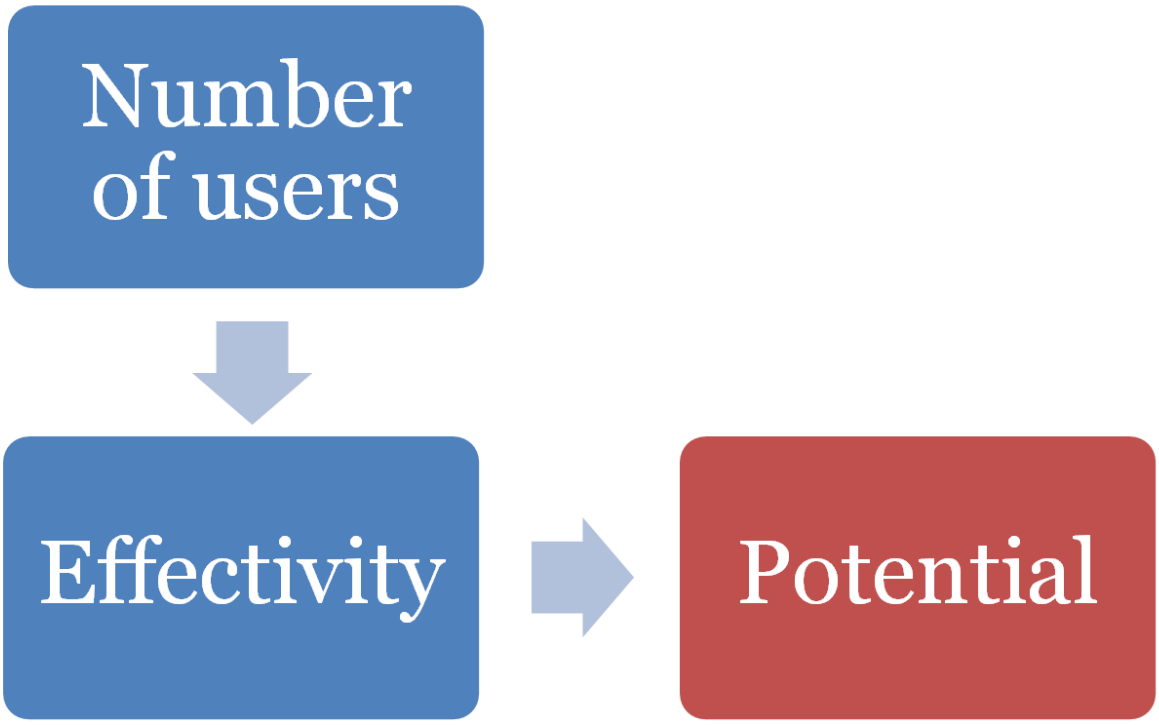


Figure 1. The conceptual model of potential of community currencies.

Methods

Desk research

Overview

To answer the research question and sub questions, an evaluative study was done. It was evaluated what currencies exist in the Netherlands, how they function and what their potential is. To reach this evaluative goal, this study consists of multiple sections, each with their respective method. The first part of the research question consists of desk research, which began with a literature study into the theoretical background of community currencies, using online academic environments. The keywords 'community currencies', 'complementary currencies', 'local currencies' and 'circular money' were used to find relevant literature in the academic search engine Google Scholar and the topic-specific search engine cc-literature.org. This literature study provided context for the introduction and formed the basis of the conceptual model. The second part of the desk research was to find community currencies in the Netherlands. This was done by looking into the literature through Google Scholar and cc-literature.org, and searching for case studies and currency overviews. Especially the academic journal *International Journal of Community Currency Research* was thoroughly examined. Through these studies, websites were found that provided overviews of currencies in the Netherlands. The found websites are community-currency.info, community-exchange.org, complementarycurrency.org, socialtrade.nl and communitycurrenciesinaction.eu. The organizations behind these three websites were contacted to ask for further knowledge of Dutch community currencies. Next to that, Facebook, LinkedIn and Google were consulted in the search for more currencies, using the same keywords as used in the literature study, and also translated into Dutch. It is argued that combining these different search methods, nearly all currently active currencies will be found. Due to time and resource constraints, community currencies that are 'under the radar' (i.e. not present online) are excluded.

This above described process generated a list of community currencies in the Netherlands. The next step was to gather as much information about them as possible through studying the websites of the currencies, reading articles and previous interviews and studies to provide information on the currencies, centered around the characteristics provided in Table 1. Also, the currencies were characterized by categorizing them based on the four types of community currencies provided in the conceptual framework. The overview and description of these currencies was visualized in Table 10 and 11 in Appendix A.

Mapping

The overview of currencies in the Netherlands was also visualized on a map. This map was created to gain insight into multiple characteristics. First, visualization was done to see whether or not the existence of community currencies in the Netherlands is evenly distributed between

urban and rural areas. This is relevant to know in order to select the right case studies, as the geographical context can have influence on impacts and barriers for currencies.

Secondly, as put forward in the conceptual framework, it is argued that the number of users influences the effectivity and the potential of currencies. Rural and urban areas differ in the amount and concentration of people, which means gaining insight into these demographic differences is relevant for the study.

Therefore, in order to gain insight into the distribution of community currencies to select the right case studies and to look into the relation between potential users in the regarding area and the potential of the currency, it was deemed relevant to map the currencies and show the urban-rural division. For the distinction between urban and rural, the OECD definition of functional urban area is used, which consists of city and commuting zone (Eurostat, 2017).
The mapping, as provided in Figure 2, showed that the vast majority of the currencies is situated in urban areas, leading to the decision to not select rural currencies for the case studies, as these currencies are not representative of the majority of the currencies in the Netherlands.

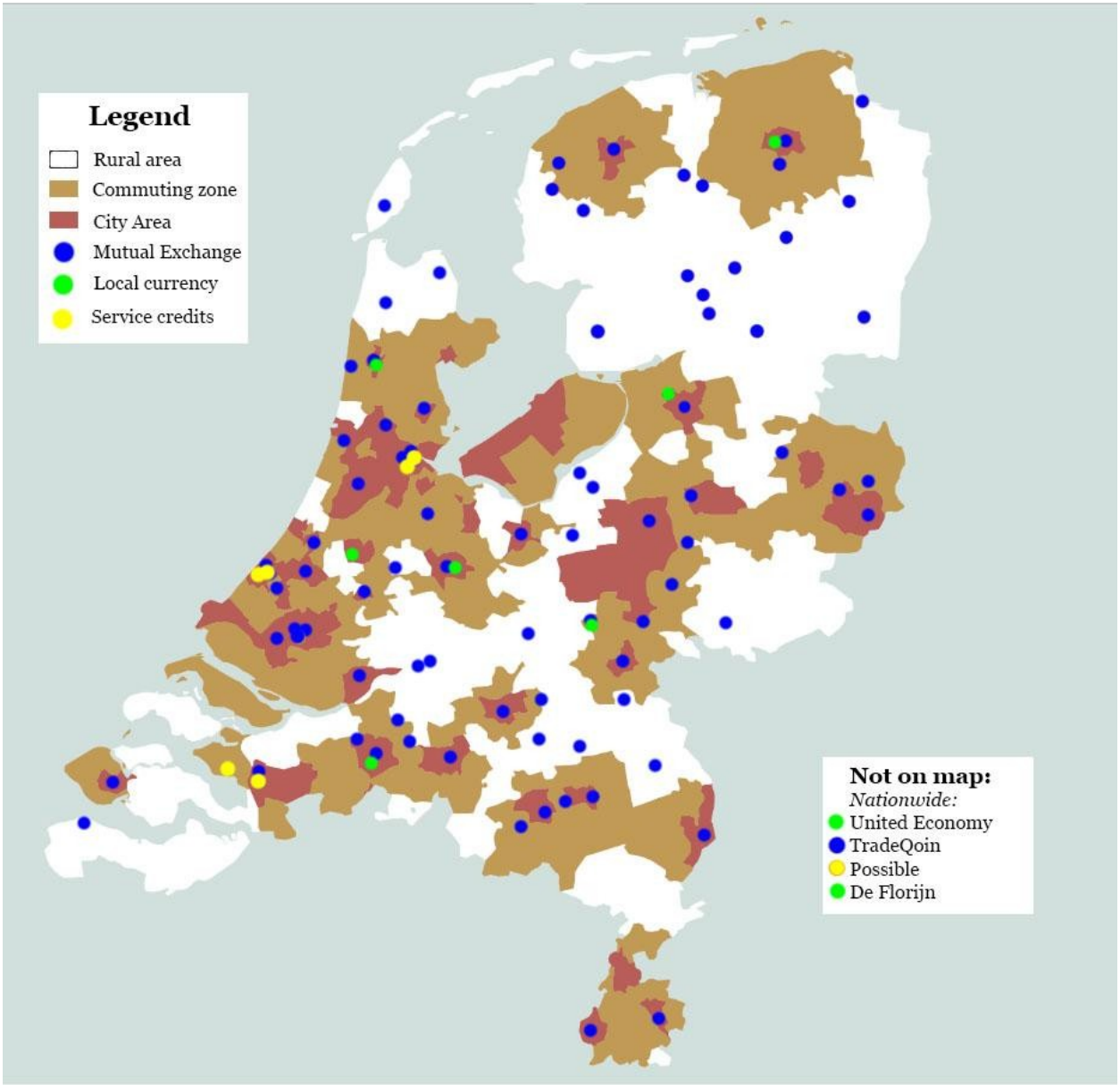


Figure 2. A map of community currencies in the Netherlands (map adapted from: Netherlands Environmental Assessment Agency, 2016)

Case studies

Three community currencies were selected for the case studies, based on the characteristics of the currencies. When looking at those characteristics, two aspects were considered relevant for the selection. First, to increase comparability of the currencies in order to draw conclusions from the case studies, currencies were selected from different types of currencies that were distinguished in the conceptual framework. As the overview showed, no currencies from the *barter markets* type were found in the Netherlands, so this type was automatically excluded from the case studies. Second, as the conceptual model shows, the amount of users has a positive effect on the potential, so the highest amount of users implies the greatest potential,

which related to the rural/urban distinction. These two aspects were combined to select *Utrechtse Euro* from the local currency type and *Timebank.cc* in Den Haag from the service credits type.

Excluding LETS systems, informal service credits type currencies which are already widely researched, the most common type of currencies in the Netherlands are local currencies, which is why the decision was made to select two local currency type currencies for the case study. The second local currency type that is selected is United Economy, as it is geographically less limited, because it is founded around an ideal of a sustainable economy. Studying United Economy provides knowledge on the difference in potential between location-based currency and objective-based currencies.

Interviews

In order to further evaluate the potential of the chosen currencies, interviews were conducted with relevant stakeholders in the network of the currency. The interviews for each case study were intended to cover different types of stakeholders in the network in order to examine diverse perspectives on the currency. To achieve this objective, one interviewee was the founder of the currency to shed light on the motivations for establishing the currency and its objectives. Other interviews were conducted with participants to provide the perspective of the users who experience the use of the currency and its impacts 'on the ground'. These users were selected based on their apparent central or active role in the currency and partially on the practical aspect of whether it was able to get in contact and their willingness to participate. In Table 3 an overview of the interviewees can be found including a short description of them.

Currency	Participant (Interviewee)	Description
Utrechtse Euro	Twan Luttikhold	Founder of the currency
	Duurzame Week (*Twan Luttikhold*)	Organizes a yearly week in which sustainability is the central theme. Received a fund from Triodos Foundation in Utrechtse Euros.
	Klein Berlijn (*Serge Veenendaal*)	A bar in Utrecht. User of the currency.
	Katoenfabriek (*Yvette van Middelkoop*)	A textile shop and textile printer in Utrecht. User of the currency.
	Jelmer Oosthoek	Individual user of the currency.
Timebank.cc	Sara Pape	Co-founder of the currency.
	Christien Temmink	Part of Lekkernassûh, a local food organization which collaborates with Timebank.cc
United Economy	Heidi Leenaarts	Founder of the currency.
	Peeze (*Karian Souverein*)	Coffee roaster in Arnhem. User of the currency. "Quartermaster", helps support and expand the currency.
	PaperWise (*Nick op den Buijsch*)	Makes recycled paper in Weert. Active user and partner of the network.

Table 3. An overview of the interviewees

It proved harder to find and reach individual participants of Timebank.cc and due to time constraints, only one participant was interviewed. For Utrechtse Euro, it proved to be easier to get in touch with participants, which made it possible to conduct four interviews with users. One of those four was with the founder, who was asked by Duurzame Week to conduct the interview for them, as he knows enough about Duurzame Week as well. When discussing the interviews in the results section, the name of the company the interviewees work for is used to refer to the interviews, as the interviewees represent their company for this study.

The interviews are centered around the indicators from Graugaard (2012), provided in Table 2. These indicators correspond to interview questions, also partially provided by Graugaard. Due to time constraints, only the indicators that can be answered using only interviews were examined, which are the indicators marked in green in Table 2. The indicators that are not selected are deemed to be better understood through the use of significantly more interviews or through the use of surveys.

The interview questions of the different interviews touched upon the same indicators, yet differ between actors. Asking the founder how the process of initiating the currency went and what its objectives are can be highly relevant and provide information that can be linked to the indicators, but can be hard or even impossible to answer by a participant in the network. The questions that follow from the framework are the same for each interview, but are rephrased to be suited for different types of actors. In Appendix B, it can be seen which questions are posed to the founder (F) or to a user of the currency (U).

The interviews were semi-structured and based on the questions of the second column of Table 2 which are linked to the indicators. However, further questions were posed if the interviewee touched on other relevant aspects of the currency. The semi-structured form of the interview allowed for the different case studies to remain similar enough to execute a comparison between the three, yet provides room for other aspects to be put forward by the interviewee. The answers that were given were transcribed and coded using the indicators from the framework. This coded dataset was used to examine the impacts and through that, the potential of the currencies.

Results

Community currencies in the Netherlands

In total, 100 different community currencies are identified in the Netherlands. Of that total, the greatest part is of the mutual exchange type (85). The second largest group was the local currencies type (8). The last type, which was least identified, is the service credits type (7). As Figure 2 shows, every type had the most currencies in urban areas, meaning also community currencies are more prevalent in urban areas. Only mutual exchange currencies exist in rural areas at all, local currency and service credits type currencies do not exist outside of urban areas, with the exception being four currencies on a nation scale. An overview is given in Table 4.

Type	Urban	Rural	Nationwide	Total
Mutual exchange	55	29	1	85
Local currency	6	-	2	8
Service credits	6	-	1	7
Total	67	29	4	100

Table 4. An overview of the types and geographical context of the currencies

In Appendix A two tables can be found providing all the community currencies that were found in the Netherlands, along with their characteristics. A few observations can be made based on Table 10. Only two currencies in the Netherlands are instigated by government bodies, namely SamenDoen and Crownies. What can also be drawn from Table 10 is that the number of participants of the currencies range from 15 to around 1000 participants, with an average of around 158 across all types of currencies. Most currencies are relatively new and were founded in the last five years, with the oldest being from 1993. Regarding the objectives, the majority of the currencies is primarily focused on supporting the local economy. Environmental sustainability is mentioned the least as being the primary objective of currencies.

Table 11 in Appendix A also shows that United Economy and Utrechtse Euro are the only currencies known to be connected to a bank. Triodos bank is a participant of United Economy currency and its foundation gave a subsidy to Duurzame Week, a participant of Utrechtse Euro paid out in that currency. Second, most currencies are connected to either local businesses or small and medium enterprises and large corporations are almost categorically excluded. The third sector or local public bodies do not often have a connection to the currencies (respectively 6 and 3 connected).

Case study 1: Utrechtse Euro

Utrechtse Euro is a digital community currency aimed at Utrecht that started in April 2017 and can be transferred through an application. However, the currency is not limited to the city itself, as the currency has participants in surrounding municipalities like Houten and even Herwijnen, approximately 35 kilometers from the city. Utrechtse Euro is a local currency type currency, which means it is intended to boost the local economy and to increase social connectedness. Utrechtse Euro's objective is to increase the economic multiplier, thereby making Utrecht more economically resilient. Currently, there are around 105 businesses and around 100 individual users which partake in the network, who had a collective revenue of more than 100 000 Utrechtse Euros. One Utrechtse Euro and one normal euro are of equal value.

Impacts

The first indicator examined is 'localization'. Utrechtse Euro causes consumption to localize, as the currency can only be spent at local businesses situated in Utrecht. By doing so, participants are incentivized to look for products and services within the network. A cash out fee of 0,5% gives a small yet effective incentive to not exchange Utrechtse Euros back to normal euros and to keep value in the network. This is supported by the fact that of around 35 000 Utrechtse Euros only around 5 000 Utrechtse Euros were converted to euros; a small amount considering the current limited possibilities for spending. Additionally, participants indicate they more often look within the network for their purchases, which shows the localization facilitated by the currency.

At the same time, this shows that consumption patterns changed. Klein Berlijn and Jelmer Oosthoek indicated they had spent Utrechtse Euros at Katoenfabriek, where they would previously not have done that. Duurzame Week spent 6000 euros in the network, as the subsidy they received from Triodos Foundation was paid out in Utrechtse Euros, where they normally would not have spent such a sum in the same way. These examples show the consumption patterns of users of the currency changed to increase consumption from within the network.

The third indicator examined is 'community building'. Utrechtse Euro intends to stimulate community building by organizing events at the venues of participants. Drinks to celebrate the first year and the hundredth participant are organized, or a wine tasting at one of the participants where another participant provided food. This cooperative way of organizing events ensures that many participants are actively involved in the community building. Interviewees indicated they indeed felt part of a community and met new people and established new relationship. Another benefit was something Jelmer put forward, which is the fact that doing transactions within this community felt better compared to regular money transactions.

An indicator where the opinions of the interviewees were less similar was for the 'awareness raising' indicator. Twan Luttikhold stated he thought awareness was raised by the use of Utrechtse Euro, as he received feedback from participants that they felt they really understood Utrechtse Euro, contradictory to less transparent conventional money, showing it made them more aware of weaknesses of conventional money. Also, the interest-free credit made

participants more aware of the fact that banks loans are intended to generate profit. On the other hand, Klein Berlijn stated that using Utrechtse Euro did not enhance awareness at all and that this is not something that came up during half a year of using Utrechtse Euro.

The 'local identity' is something participants feel is strengthened by Utrechtse Euro. For Klein Berlijn it is even something that contributed to the decision of joining. "Ik ben een ras-Utrechter en Klein Berlijn is een klein Utrechts bedrijf"[1], as mentioned by Klein Berlijn, when asked about Utrechtse Euro. This quote clearly reflects the connection between Utrechtse Euro and the feeling of being Utrechter. Jelmer indicates the local identity as being central to Utrechtse Euro and as being essential to ensure broad acceptance of something like Utrechtse Euro.

On the environmental indicator 'sustainable consumption', it is argued that Utrechtse Euro has led to an increased sustainable consumption. First, there is more consumption from within the network, meaning consumption is inherently more local, which is argued to have environmental benefits. Second, the choice of suppliers has environmental benefits. Both printer Libertas and Katoenfabriek, who tend to use organic products, are mentioned as having attracted more customers from the network, which is also argued to have environmental benefits.

Barriers

Twan Luttikhold indicated barriers that are clearly of an organizational nature. Twan indicated limited capacity in the form of manpower hampered growth. More people working towards maintaining and expanding the network could mean faster growth. Second, limited financial resources are slowing growth, compared to a situation with unlimited financial resources. He added that this is not solely to be seen in a negative view, as growth that is too fast is seen as unnatural.

Secondly, being a seller of a product, the process of paying is something that should require as little steps as possible. Payment in Utrechtse Euros is a process that includes more steps in order to perform a transaction, which is less desirable, as it requires more time and effort to perform. Also, the technological aspect is a barrier for some entrepreneurs that are less familiar with such applications, although this is a minor barrier as the software is easy to use.

From a user perspective, Jelmer indicated that the knowledge of the businesses' staff of how the system works is sometimes insufficient and leads to delay or even the impossibility of paying with Utrechtse Euros. Interesting note is that after one of the interviews, an attempt was made to pay using Utrechtse Euros, which failed due to the fact that login information for the application was unknown amongst the employees of the business.

Lastly, the diversity of the network can become a barrier. Although, over 100 businesses are participating, not every category of business is represented in the network. Also, as Jelmer stated, it are often businesses that attract a certain profile of consumers that are added to the network, which could mean certain parts of the possible participants do not see benefits of using

1 Translation: "I am a true Utrechter and Klein Berlijn is a small business from Utrecht."

Utrechtse Euros. To prevent this, a greater diversity of shops should be added to stay attractive to all sorts of possible participants.

Potential

Impacts	
Localization	More local consumption
Consumption patterns	Shifted to more consumption from within the network
Community building	An active community where participants felt part of was created
Awareness raising	Awareness was raised to a large extent, yet not among all participants
Local identity	Local identity was strengthened
Sustainable consumption	Consumption is more sustainable
Barriers	
• Lack of manpower and financial resources • Extra steps in payment process • Lack of knowledge of staff • Limited diversity in network (could become future barrier)	

Table 5. An overview of the impacts and barriers of Utrechtse Euro

Based on the information, which is summarized in Table 5, and based on the fact that Utrechtse Euro grew from 0 to 105 participants in roughly one year and already showed significant impact, and based the fact that current barriers are relatively minor and easy to overcome, provides the conclusion that Utrechtse Euro has serious potential to bring social, economic and environmental benefits.

Case study 2: Timebank.cc

Timebank.cc is a community currency situated in Den Haag and is at this point the biggest community currency in the Netherlands. Timebank.cc is a currency of the service credits type, meaning it has time as a central unit of value. Participants can earn the currency by performing services and receive Timebank.cc hours for every hour spent delivering the service. These hours can be used to purchase services of other participants at the rate of 1 hour of work being equal to purchasing 1 hour of service from the other. In other words, every hour spent working is equal for all participants, whatever the service performed. Timebank.cc starting in 2013 and evolved from being an art project to being an actual currency with around 1000 participants. The idea behind the currency is to make exchanges without money possible and through that, to work towards an equal society.

Impacts

Timebank.cc facilitates localization of goods and services as participants offer their services through the online platform. Other participants can directly consume these services from the supplier. As participants are from Den Haag and surrounding areas, the participants consume their services from suppliers in their vicinity. Therefore, by linking these buyers and suppliers to each other, Timebank.cc facilitates localization.

As indicated by interviewees, they have looked for goods and services within the network more after joining Timebank.cc. One interviewee stated she found a yoga class in the network and uses Timebank.cc hours to pay for these classes. Sara indicated she felt participants do seek services in the network more often, although a large part of the participants has to be reminded to look in the network, as they did not think about doing so. Therefore, the consumption patterns of the participants did change, yet sometimes requires more stimulation.

In order to build a community, activities are organized by the organization of Timebank.cc and by participants. These activities are formed around meeting new participants and showing the ideals and possibilities of Timebank.cc. One example is Timebank Slam, in which participants could pitch their offers and wants during an accessible event where they also have the possibility to get to know each other. Interviewees state that through such activities and performing transactions indeed a community feeling arose, although this is centered around a limited set of participants. Besides this aspect, a community feeling is created through the feeling of equality between the participants, as Sara indicated: “Voor mij persoonlijk geeft het een beter gevoel om iets voor elkaar te krijgen met uren dan met euro's (..) door de gelijkwaardigheid”.[2] Thus, Timebank.cc succeeded in building a community through the introduction a currency based on equally valued hours, which is also reflected in the quote of Christien from Lekkernassûh: “Timebank is een verbindende valuta”.[3]

For the indicator ‘awareness raising’, interviewees stated that awareness surrounding weaknesses of the conventional money system was already present among a large part of the participants. However, it was also indicated that participants did ask questions about the why of the currency, indicating awareness was raised among participants that were not that aware before they started using the currency.

The strengthening of the local identity is not one of the primary objectives of Timebank.cc and is also something that did not come forward during the interviews, which indicates that this is not something that is intended to be reached. Therefore, the strengthening of the local identity is not one of the impacts of Timebank.cc.

As is shown by the results for the indicators ‘localization’ and ‘changing consumption’, consumption shifted towards are more local consumption, which is argued to be beneficial for the environment. Besides this localization aspect, another aspect of Timebank.cc is relevant

2 “For me personally it gives a better feeling to accomplish something using hours rather than with money (..) because of the feeling of being equal”
3 “Timebank is a connecting currency”

when examining sustainable consumption. Being part of a network like Timebank.cc, gives participants easy and relatively cheap access to participants that can repair goods, which is more sustainable than throwing away and replacing the broken goods. For example, current offers in the network are pc repair and clothing repair. This shows that one of the impacts of Timebank.cc is an increased sustainable consumption.

Barriers

The interviewees indicated that although they are happy with Timebank.cc, certain barriers are faced. First, there are a number of participants that are regular volunteers at the events, who are rewarded with hours. At the same time, some of these people are not spending enough of those hours, meaning hours are concentrated at certain participants. This means the currency is not functioning properly, as the hours should be flowing through the system and should not be concentrated in a few places.

Another barrier put forward is that within Lekkernassûh as an organization, there is a lack of oversight, meaning sometimes hours are rewarded too easily or not rewarded when they should. Also, the volunteers that are rewarded sometimes take a long period before collecting their hours, meaning the hours-expenses of Lekkernassûh fluctuates more than it should. In sum, there could be improvement regarding the practical skills, organization and information among participants.

A third issue that should be addressed was a lack of diversity in services provided within the network. As one interviewee indicated, the network should contain more ‘mainstream’ services in order to increase the size of the community.

A fourth issue that was not explicitly stated by the interviewees, but was implicitly touched upon, is the fact that it can be hard to incorporate the consumption of goods in the system. The unit of value is time-based and goods are hard to define and value in hours. This is a limitation of the system in its current form and context.

Potential

Impacts	
Localization	More local consumption
Consumption patterns	Shifted to more consumption from within the network
Community building	An active community where participants felt part of was created
Awareness raising	Awareness was raised, although already high
Local identity	Local identity was not strengthened
Sustainable consumption	Consumption is more sustainable
Barriers	
• Currency sometimes concentrates at certain participants • Lack of practical skills, organization of information can make the use of the currency difficult • Lack of diversity in services provided • Hard to include consumption of goods in the system	

Table 6. An overview of the impacts and barriers of Timebank.cc

Based on the analysis of the indicators, some conclusions can be drawn. First, Timebank.cc caused consumption patterns to shift to more consumption from within the network, ensuring partial localization of the economy and an increased sustainable consumption. Also, awareness was raised and a community was built. Most of the barriers are not major and or hard to overcome, for example the difficulty of keeping the currency flowing. However, the fact that the network already grew to around 1 000 users in five years does add to the potential. In sum, the currency realized positive impacts and experienced steady growth, and faces barriers that are not major, meaning it has serious potential.

Case study 3: United Economy

The third case study is focused on United Economy, a local currency type currency. As a type of currency it is similar to Utrechtse Euro, but United Economy is nationwide instead of region-based. United Economy started in February 2016 and grew to a network of around 70 participants, all Dutch businesses. United Economy is intended to work towards system change by making money work differently, without interest and without speculation, to stimulate a more sustainable economy. Therefore, all participating businesses have a special interest in the environmental aspect. Possible participants are audited to confirm their intentions are in line with the ideals of United Economy. The currency of United Economy is Uniteds, which are equal to 1 euro.

Impacts

As United Economy is geographically limited to the Netherlands, the consumption within the network is inherently limited to the Netherlands. Therefore, increasing consumption within the network is increasingly localized consumption. Any transaction within the network is a transaction not executed outside the Netherlands. As the number of transactions in the network increased, this is an indication that transactions were more local, thereby realizing a more localized economy.

As mentioned above, interviewees indicated that they consumed more from other participants in the network. PaperWise and Peeze stated that, when looking for new goods and services, they first looked at possibilities to consume in the network. Therefore, the shift in consumption did not entail goods and services from suppliers with whom a satisfactory relationship exists. Next to this, all interviewees mentioned that also pre-existing relationships changed to being performed in Uniteds instead of euros.

United Economy contributes to the building of a community through multiple events. There are different kinds of meetings between different people, intervision groups to talk and help each other progress towards increased sustainability. These and other events, but also the feeling of being connected through the currency, have stimulated the forming of new relationships between participants and has strengthened pre-existing relationships. As Heidi Leenaarts puts it: “Circulair geld is ook relatiegeld, het bekrachtigt de relatie. (..) Het voelt totaal anders dan als je in euro’s afrekent, en de producten die ik bij ze koop, daar heb ik ook een veel beter gevoel bij”[4], reflecting the social aspect of the use of United Economy as a currency and the fact that it strengthens the community feeling.

As for awareness raising, interviewees indicate that awareness is raised among participants, yet to a varying extent. PaperWise indicated that awareness was certainly raised, especially on the topic of the economy not being based on the real economy, but on speculative markets. This can be attributed to United Economy, as the currency actively stimulates awareness. This starts as soon as new participants join, when they receive a free copy of the book of the founder on rethinking the economy. Also, it is indicated that the fact that certain goods and services are available in the network, causes participants to be triggered to think about what choice they want to make for a new supplier and the product they want to consume. One side note that has to be made is that Peeze mentioned that their awareness was raised, yet it is doubted whether this is among all employees, thereby indicating awareness raising may be limited to specific actors in participating businesses.

Strengthening the local identity is not one of the main objectives of United Economy and is also less relevant, as United Economy is nationwide. The strengthening of the local identity is also not something that was confirmed by the interviewees. Therefore, the conclusion is drawn that United Economy does not contribute to the strengthening of the local economy.

4 “Circular money is also relationship money, it strengthens the relationship. (..) It feels entirely different from paying with euros and the products I purchase from them, they also give a better feeling”

The key feature of United Economy is the focus on increasing sustainability. This is reached in two ways. First, many businesses, for example PaperWise, saw in increase in consumption from the network. As businesses from the network are more sustainable, which is essential to join the network, it can be said that consumption is increasingly sustainable through the use of United Economy. Also, there is an increased consumption from within the network, which is exclusively Dutch. Therefore, it is likely this means a more geographically local consumption, which is argued to be ecologically beneficial. However, interviewees state that their consumption was already to a large extent sustainable, which questions the extent to which increased sustainable consumption can be attributed to the use of United Economy.

Barriers

One barrier that stood out and was mentioned by all interviewees is the fact that possible participants are hesitant to join. Often, possible participants are interested in the concept, but lack the sense of urgency or the pioneer spirit to actually join and start using the currency. They often want to wait and see how United Economy actually grows and develops, thereby hampering the growth and development of United Economy. This is a paradox, yet is put forward by all those interviewed about United Economy.

Peeze mentioned United Economy has a limited range of participating businesses, which makes it hard to discuss and share United Economy within the participating companies, as it is barely known among colleagues. This difficulty also limits the possibilities for the raising of awareness within participating businesses, as the concept is not spread within the respective companies.

A third barrier is of a more practical nature. Especially for large companies, practical barriers surrounding bookkeeping are holding companies from joining. Large companies automated their bookkeeping and administration to a large extent, which has to be partially undone in order to ensure correct transaction using Uniteds. Often, such companies are hesitant to do so. In the future, technological developments could solve this, but this is something that is deemed impractical at this point in time.

Potential

Impacts	
Localization	More consumption within The Netherlands
Consumption patterns	Shifted to more consumption from within the network
Community building	An active community where participants felt part of was created
Awareness raising	Awareness was significantly raised
Local identity	Local identity was not strengthened
Sustainable consumption	Consumption is more sustainable, although already predominantly sustainable
Barriers	
• Possible participants are interested, yet hesitant to join • The range of participants is limited, which increases difficulty to discuss the concept and raise awareness within participating companies • For large, automated companies, bookkeeping has to be partially de-automatized	

Table 7. An overview of the impacts and barriers of United Economy

United Economy has shifted consumption patterns among participants, as they consume more within the network, thereby localizing the economy and realizing a more sustainable consumption. At the same time, awareness was raised to a large extent and an active community was built, both also contributing to the potential of the currency. However, the growth in the number of users is lower compared to Utrechtse Euro and Timebank.cc. Also, the fact that all three interviewees mention that possible participants are hesitant to join indicates that growth is not likely to accelerate in the close future. Therefore, although United Economy has showed certain impacts, the number of users and growth of that number hamper the potential at this point in time.

General

Impacts

Impacts			
Indicator	*Utrechtse Euro*	*Timebank.cc*	*United Economy*
Localization	More local consumption	More local consumption	More consumption within The Netherlands
Consumption patterns	Shifted to more consumption from within the network	Shifted to more consumption from within the network	Shifted to more consumption from within the network
Community building	An active community where participants feel part of is created	An active community where participants feel part of is created	An active community where participants feel part of is created
Awareness raising	Awareness was raised, yet not among all participants	Awareness was raised, although already high	Awareness was significantly raised
Local identity	Local identity was strengthened	Local identity was not strengthened	Local identity was not strengthened
Sustainable consumption	Consumption is more sustainable	Consumption is more sustainable	Consumption is more sustainable, although already predominantly sustainable

Table 8. An overview of the impacts of the currencies

As shown in Table 8, all three currencies have shown beneficial impacts, partially similar, partially different. The indicators for which the currencies have shown similar impacts are localization, consumption patterns and community building. All three currencies have shown they can realize a more localized economy, by providing currencies which are to be spent in a geographically limited area. All three currencies have caused participants to initially look in the network when looking to consume new goods and services, hereby changing consumption patterns of the participants. Thirdly, all three currencies have shown an increase in community feeling. The central organization of the currencies all have organized events in order to promote community building and in all cases, interviewees indicated they felt part of a community and that relationships are created or strengthened between them and other participants.

As for the other indicators, the currencies have shown less similar impacts. In general, for all three currencies the raising of awareness was accomplished, but not to similar degrees. For Utrechtse Euro, most interviewees stated they felt an increased awareness, yet one stated he did

not feel more aware at all, showing awareness was not raised for all participants, limiting potential. Participants from Timebank.cc indicated that awareness was raised, but that awareness was already high, making it more difficult to attribute further awareness to the currency. Interviewees from United Economy all mentioned their awareness was strongly raised, making it the strongest awareness impact of the three. The greatest difference between the impacts of the examined currencies is for the local identity. Where Timebank.cc and United Economy do not strengthen local identity, as this is not one of the key features of the currencies, Utrechtse Euro did in fact strengthen local identity, related to the fact that Utrechtse Euro also has the most focus on the local. For sustainable consumption, the impacts are similar as all currencies caused consumption to be more sustainable, although for United Economy participants the consumption was already predominantly sustainable, making it more difficult to establish the link between the currency and the impact.

Barriers

Barriers		
Utrechtse Euro	*Timebank.cc*	*United Economy*
• Lack of manpower and financial resources • Extra steps in payment process • Lack of knowledge of staff • Limited diversity in network (could become future barrier)	• Currency sometimes concentrates at certain participants • Lack of practical skills, organization of information can make the use of the currency difficult • Lack of diversity in services provided • Hard to include consumption of goods in the system	• Possible participants are interested, yet hesitant to join • The range of participants is limited, which increases difficulty to discuss the concept and raise awareness within participating companies • For large, automated companies, bookkeeping has to be partially de-automatized

Table 9. An overview of the barriers faced by the currencies

Table 9 contains the barriers for all three currencies. As there are multiple barriers per currency, which differ in severity, only the barrier with the largest impact is covered. For Utrechtse Euro, four barriers are identified, of which the most significant is the last one. Although this barrier is not hampering growth at this point in time as far is known, it is argued and stated by interviewees that this could become a problem in the future. Up till now, the network of Utrechtse Euro to a large extent consists of participants of a specific socio-economic profile. This is turn also attracts new participants that fit this profile, thereby reinforcing the prevailing

composition. Through this positive feedback, the currency becomes increasingly irrelevant for possible participants that not attracted by this profile, seriously limiting the potential of the currency.

For Timebank.cc, also four barriers are identified. The largest barrier to having potential is the fact that in a system such as Timebank, often the currency tends to concentrate in few places. Certain actors tend to contribute their time generously to the network and are then rewarded with a lot of Timebank hours, yet are hesitant to ask for services. This is also put forward by one interviewee who mentioned that there is a small selection of volunteers that work often and earn a lot of hours and do not spend them. Therefore, the rest of the network faces a lack of Timebank hours and therefore does not function properly, thereby limiting the potential of the currency.

United Economy faces three barriers, of which the hesitance of possible participants is the largest. All interviewees indicate that when approaching possible participants that seem suited to use the currency, possible participants are initially interested, yet are hesitant to make next steps and actually start using the currency. The reason for this hesitance is uncertain. Possible explanations that were put forward are a lack of sense of urgency, a lack of awareness and not feeling the need for change, which are all interrelated. Thus, the currency that is focused the most on sustainability faces the most hesitance to join due to a lacking awareness and sense of urgency.

Potential

In conclusion, all three currencies have shown large impact on their participants, which differs between the currencies and the indicators, but can be said to be similar overall. All currencies face multiple barriers with different severity. However, when looking at the number of users, which is argued to increase potential, some conclusions can be drawn. As United Economy has shown the lowest growth and the lowest total number of users, its potential can be seen as less than that of the other two currencies. Utrechtse Euro has grown faster and already has more users, meaning the impacts reach more people. Timebank.cc has grown the fastest and has the most number of users, so its impact spreads across the largest number of people. Therefore, it is argued that Timebank.cc shows the most potential of the currencies under examination.

Discussion

This study provides an overview of community currencies in the Netherlands and examines their potential. This is done by performing desk research and by conducting interviews based on a framework by Graugaard (2012). For the desk research part, this study uses solely online environments to trace all the community currencies in the Netherlands. Although this approach most likely provides the majority of the community currencies, it is also likely that currencies exist that are not represented online and are therefore not part of the results of this study. Therefore, it cannot be said that this study provides an overview of *all* the community currencies in the Netherlands.

The interviews are based on the framework by Graugaard, which shaped the study. Although the framework by Graugaard consists of a broad range of indicators on all three aspects of sustainability, it can be said that another framework possible would have generated other results. For example, a purely economic framework could have provided other results.

The interviews provided a good insight into the perspectives of the users and into the impacts that are experienced. However, the users that were interviewed only represent a small part of the total community of users and are not necessarily representative for the entire population. Partially, this is because the users that are willing to be interviewed are likely the users that have a positive attitude towards the currency and are likely to give more positive answers to the question posed. Therefore, it is argued that there is a positive bias among the interviewees and that the negative opinions are underrepresented. To counter this, future research could examine ex-participants of community currencies.

Although providing abundant information, interviews are inherently subjective. To be able to draw final conclusions about some of the impacts, other forms of research are also required. For example, to draw conclusions about the localization aspect, economic data is required in order to gain full insight into whether or not consumption is more local than before. Therefore, recommendations for further research are to examine this topic using other research methods in order to complement the results of this study. Surveys could reach a broader range of users, partially eliminating the positivity bias. As mentioned before, the results could also be complemented with economic data to support the partially subjective results of this study. Due to time constraints, this has not been done for this study.

Despite certain limitations, this study provides knowledge of community currencies situated in the Netherlands. An overview of community currencies in the Netherlands, as is provided by this study, did not yet exist. Also, case studies of Dutch community currencies were scarce or concern currencies that do not exist anymore. This study fills both these knowledge gaps.

Conclusion

In this study, the answers to the research question put forward in the introduction were researched. To answer the question, a qualitative, evaluative study of existing community currencies and their potential was done.

From the results, it appears that there are 100 community currencies currently active in the Netherlands. Most of the currencies are mutual exchange type currencies (85), followed by local exchange type currencies (8) and service credits currencies (7). There are no barter markets currencies in the Netherlands. Community currencies in the Netherlands are primarily situated in urban areas (67) as opposed to rural areas (29). Next to that, there are very few currencies that are nationwide (4). Not including LETS currencies, the number of users of the currencies varies from 15 users to around 1000 users, with an average number of users of 158. The oldest, still active currency was founded in 1993, but most currencies are founded in the past five years. The majority of the currencies has objectives that are primarily focused on the economy. Lastly, nearly all currencies are connected to local businesses, related to the fact that most currencies have an economic focus, and hardly any currencies have connections to banks (2), the third sector (6) or local public bodies (3).

The second part of the study consists of three case studies, examining Utrechtse Euro, Timebank.cc and United Economy. Following from the framework used to examine these currencies, certain conclusions can be drawn. First of all, all three currencies have shown positive impacts on their network, although the impacts of the currencies differ per indicator, as is shown in Table 9. At the same time, these currencies face certain barriers, which also differ in severity. Utrechtse Euro faces the barrier that it may lack variety of participants in the future. Timebank.cc faces the barrier that the currency tends to concentrate among a few participants. United Economy faces a hesitance of possible participants to join. Timebank.cc has the fastest growth of number of users and highest number of users, followed by Utrechtse Euro and lastly United Economy. Therefore, as Timebank.cc has shown significant positive impact, minor barriers and the fastest growth and highest number of users, it has the highest potential of the three currencies.

However, provided all three currencies have shown positive impacts and are ever increasing in number of users, it can be said that in general, community currencies have serious potential to establish themselves as a tool to bring about change that is seen as beneficial.

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Appendices

Appendix A

If the currency is in bold text, this means this currency is examined as a case study in this study.

Community currencies in the Netherlands						
Name	# of users	Place	Year	Instigator	Objectives	Type SC/ ME/ LC/BM
United Economy	**70**	**NL**	**2016**	**Heidi Leenaarts**	**System change by making money work differently, without interest and speculation, to make it work in favor of sustainability, towards a sustainable economy.**	**LC**
Utrechtse Euro's	**205**	**Utrecht**	**2017**	**Twan Luttikhold STRO**	**To increase the circulation of money before it leaves Utrecht and increase the economic activity for local businesses and increase the economic resilience of the region.**	**LC**
SamenDoen (2 connected coins)	51	Tholen Bergen op Zoom	2014	Municipality of Tholen Stadlander Qoin	To encourage citizens to become active in their community, and at the same time support the local economy.	SC
NOPPES	450	Amsterdam	1993	Students STRO ('Strohalm' at the time)	To encourage a strong economic and social network in which services and goods can be traded.	SC
Makkie	57	Amsterdam (Indische Buurt)	2012	De Makassarplein Community Samen Indische Buurt CCIA	To empower citizens and to encourage them to become active in their community.	SC
TradeQoin	148	NL Noord-Holland Achterhoek	2013	Qoin	To provide small and medium enterprises with an alternative for conventional money, which provides interest-free credit and increased competitive advantage.	ME
Dam	460 (end of 2016)	Rotterdam	2013	Henry te Riele Arie Smitskamp Bob Bennink Christine Gardner Hermann Matieschek Caspar Bouhof	To provide an alternative for conventional money, which provides interest-free credit and aims to increase revenue and spending for participants.	ME
Possible		NL	Not yet	Marianne van Leeuwen Diana Kretschmann	To provide an alternative for conventional money that values volunteering work that benefits society.	SC
Timebank .cc	**1000**	**Den Haag Amsterdam**	**2013**	**Joeri Oudshoorn Mara Wasiuta**	**To provide an alternative for the conventional economy and to**	**SC**

				Ronald Huynen Liesbeth Schoonheim Sara Pape	**enable exchanges with transactions based on time, working towards an equal society.**	
De Grulden	15+	Groningen	2016	De Munterij	To provide an alternative to conventional money that is inclusive, sustainable, social and based on real products and services.	LC
Vix	63	Alkmaar	2018	Dennis Engelsma Wim van Bokhorst	To encourage the spending of money in the region to stimulate the local economy.	LC
Zwolse Pepermunt	40	Zwolle	2015	Frank Hart (among others)	To increase the economic, social and ecological sustainability in the region of Zwolle.	LC
Eurijn	38	Wageningen	2018	Erik Groen	To provide an alternative to conventional money that stimulates the local economy and contributes to sustainability	LC
Brabantse Parel	19	Breda Brabant	2016	Joost Barendrecht	To stimulate a local circular economy where human interaction and social contact are central.	LC
De Florijn	98	NL	2016	Anthony Migchels Barry Annes Marco Janssen	To provide interest-free credit and to bolster consumers' purchasing power.	LC
Crownies	150	Den Haag	2015	Municipality of Den Haag	To encourage kids and youth to actively contribute to their community by rewarding this with spendable credits.	SC
De Alphense Betaalwijze	94	Alphen aan de Rijn	2015	Stichting DAB	To ensure a higher circulation of money in the local economy.	LC
LETS[5] (82x)	Varies		Varies	Varies	To provide an alternative to the conventional economy which includes everyone and treats everyone equally based on time as a currency.	ME

Table 10. An overview of community currencies in The Netherlands

5 LETS are found in the following places: Alkmaar, Amersfoort, Amsterdam, Annerveenschekanaal, Apeldoorn, Arnhem, Assen, Barneveld, Beek en Donk, Bolsward, Breda, Breskens, Brummen, Cuijk, Culemborg, Delft, Delfzijl, Den Bosch, Den Burg, Den Haag, Deventer, Dieren, Dirkshorn, Doetinchem, Dordrecht, Drachten, Eelde, Egmond aan de Hoef, Eindhoven, Emmeloord, Emmen, Enschede, Ermelo, Etten-Leur, Franeker, Gouda, Groningen, Haarlem, Halsteren, Harderwijk, Heerlen, Heino, Helmond, Hengelo, Hoofddorp, Hoogeveen, Leeuwarden, Leiden, Loosdrecht, Maastricht, Middelburg, Nijeveen, Nijmegen, Nijverdal, Nuenen, Oldenzaal, Oosterhout, Oss, Purmerend, Rijen, Rotterdam, Sleeuwijk, Sneek, Steenwijk, Tiel, Tilburg, Utrecht, Ureterp, Veghel, Veldhoven, Venlo, Venray, Vlaardingen, Wageningen, Westerveld, Weststellingwerf, Wieringerwerf, Woerden, Woudrichem, Zaandam, Zoetermeer, Zutphen

Name	Connection with:			
	Banks	Local businesses	Third sector	Local public bodies
United Economy	**Triodos Bank is one of the key partners.**	**Small and medium enterprises are seen as the backbone of the ideal economy, so strong connection.**	**Not connected.**	**Not connected.**
Utrechtse Euro's	**One participant received subsidy from Triodos in the currency.**	**Intended for local businesses.**	**Not connected.**	**Not connected.**
SamenDoen	Not connected.	Connected as points can be saved and spent at local businesses.	Connected as points can be saved for local charities or ngo's.	Points can be earned by certain acts that are beneficial to society.
NOPPES	Not connected.	Not connected.	Connected. A 'Joepie Fonds' is available for charities.	Not connected.
Makkie	Not connected.	Makkies can be spent at local businesses.	Not connected.	Points can be earned by certain acts that are beneficial to society.
TradeQoin	Not connected.	Created for small and medium businesses, not necessarily local.	Not connected.	Not connected.
Dam	Not connected.	Connected to local businesses.	Not connected.	Not connected.
Possible	Not connected.	Credits can be spent at local businesses.	Credits can be rewarded by third sector organizations.	Not connected.
Timebank	**Not connected.**	**Not**	**Time credits can**	**Not connected.**

.cc		connected.	be spent and earned at projects, which are mostly volunteering and non-profit initiatives.	
Grulden	Not connected.	Can be spent only at local businesses.	Not connected.	Not connected.
Vix	Not connected.	Can be spent only at local businesses.	Not connected.	Not connected.
Zwolse Pepermunt	Not connected.	Can be spent only at local businesses.	Are not connected at this time. Could be in the future.	Not connected.
Eurijn	Not connected.	Can only be spent at local businesses.	Not connected.	Not connected.
Brabantse Parel	Not connected.	Can only be spent at local businesses.	Not connected.	Not connected.
De Florijn	Not connected.	Not necessarily local.	Not connected.	Not connected.
Crownies	Not connected.	Not necessarily connected.	Points can be spent to support charities.	Credits issued to support local public policy.
De Alphense Betaalwijze	Not connected.	Can be spent only at local businesses.	Can be used for social non-profit goals.	Not connected.
LETS	Not connected.	Varies. Often credits can be spent at local businesses.	Varies.	Not connected.

Table 11. An overview of the connections of currencies in The Netherlands

Appendix B

The interview that is conducted can be found below. The interviewees are Dutch, so the interview is also conducted in Dutch. The translation of the interview is added below the Dutch

version. As stated in the methods section, the question differ between the different actors as some are relevant to ask the instigator and some are relevant to ask a participant. Therefore, in front of the questions either an F for founder or an U for User, or both, is added to show for whom the question is intended.

Dutch

Wat betreft het interview. Ik ben uiteindelijk op zoek naar het antwoord op een aantal vragen. Die vragen zullen gericht zijn op het kwalitatief onderzoeken van het potentieel van alternatieve valuta als de Utrechtse Euro om sociale, economische en ecologische voordelen te realiseren. De vragen waarop ik antwoorden zoek zijn vragen die komen uit de literatuur, specifiek een onderzoek van Graugaard naar de Lewes Pound, waarin een framework is ontwikkeld om de effecten van in dat geval de Lewes Pound te onderzoeken aan de hand van indicatoren met daaraan gekoppelde vragen. Door de antwoorden hierop te krijgen, hoop ik iets te kunnen stellen over de mate waarin UE bereikt wat het wenst te bereiken en daarmee samenhangend de potentie ervan om voordelen te bieden. Door deze casestudy te combineren met twee andere case studies, namelijk naar United Economy en Timebank.cc in Den Haag, hoop ik iets te kunnen stellen over de potentie van zulke alternatieve ruil- en geldsystemen in Nederland in het algemeen.

Uiteindelijk heb ik dus wat vragen die ik beantwoord wil hebben, maar tegelijkertijd ben ik zelf ook erg geïnteresseerd, dus zal ik deels voor het onderzoek, maar ook deels voor mezelf af en toe even doorvragen op dingen die je noemt. Dat betekent dat ik soms ook weer een sprongetje terug naar de vragen op het papier moet maken, maar ik zal proberen dit zo soepel mogelijk te doen.

Ik wil even beginnen met wat inleidende vragen, deels om mijn gevonden informatie te factchecken.

(F) In welk jaar is *currency* daadwerkelijk van start gegaan?

(U) Wanneer ben je begonnen met het gebruik van *currency*?

(F) In welk jaar is het idee ontstaan om *currency* te gaan opzetten?

(F) En hoe is dat proces gegaan tussen eerste idee en de daadwerkelijke start van *currency*?

(F) Kun je beschrijven wat de doelstelling is van *currency*?

(U) Kun je beschrijven wat de motivaties zijn geweest om aan te sluiten bij de *currency?*

(F) Kun je beschrijven hoe je denkt dat *currency* deze doelen bereikt?

(F) Zijn deze doelen gedeeld door alle deelnemers? Of hebben zij andere overwegingen om mee te doen aan *currency*?

(F/U) Zou je voor mij sociale doelen, duurzame doelen en economische doelen voor mij kunnen rangschikken naar prioriteit?

(U) Welk percentage van de uitgaven en inkomsten van *user* zijn in *currency*?

(F) Hoeveel deelnemers heeft *currency* nu eigenlijk?

(F) Wat voor deelnemers zijn dit allemaal? Allemaal bedrijven of ondernemers, of zijn er ook lokale overheden, ngo's of goede doelen betrokken? En particulieren?

(F) Zie je deze samenstelling in de toekomst veranderen? Zie je bijvoorbeeld mogelijkheden om andere samenwerkingen aan te gaan? Je kunt bijvoorbeeld denken aan een manier waarop individuen de *currency* kunnen verdienen door meer afval te scheiden en zo een koppeling te maken met lokaal beleid.

(F) Dan wil ik nu wat meer doorgaan richting de effecten die *currency* teweegbrengt. Dat valt misschien lastig te zeggen op basis van een relatief korte periode dat *currency* actief is en sommige vragen zijn misschien makkelijker te beantwoorden door een gebruiker van de *currency*, maar probeer gewoon naar je beste inzicht iets te zeggen over de effecten, het is juist interessant jouw perspectief te zien.

(F/U) Denk je dat *currency* ervoor heeft gezorgd dat goederen en diensten vaker bij aangesloten bedrijven worden gezocht en geconsumeerd?

(F/U) Met andere woorden, kun je dus zeggen dat er lokaler wordt geconsumeerd?

(U) Met wat voor soort gebruikers handel je het meest in *currency*? Individuele gebruikers of bedrijven en organisaties? Wat voor bedrijven of organisaties zijn dit?

(F/U) Denk je dat *currency* gezorgd heeft voor een verhoogde omzet bij deelnemers? Of is wellicht de omzet gelijk gebleven, maar is een deel van de omzet vervangen door *currency* in plaats van gewone euro's?

(F/U) Denk je dat de onderlinge verbondenheid vergroot is tussen de deelnemers? Dan doel ik met name op het sociale vlak. Is er meer informeel contact, worden er vaker ideeën uitgewisseld, zijn er bijvoorbeeld borrels voor deelnemers?

(F/U) En is dit te wijten aan *currency*, of was het contact er voorheen ook al?

(F/U) Heb je het idee dat *currency* bijdraagt aan bewustwording onder de deelnemers wat betreft de zwaktes van het conventionele geldsysteem? Op welk vlak zie je dit met name terug? Sociaal, economisch of ecologisch?

(F/U) Denk je dat het gebruik van *currency* de lokale identiteit versterkt?

(F/U) Wat zijn obstakels of barrières die worden ervaren bij het gebruik van *currency?*

(F/U) Op wat voor manieren zouden deze barrières overkomen kunnen worden? Wat kan er anders of beter?

(F/U) Andersom, wat zijn de motivaties of voordelen om *currency* te gaan gebruiken?

(F) Hoeveel *currency* zijn er gecirculeerd afgelopen jaar? Of in totaal?

(F) Hoeveel *currency* zijn terug ingewisseld voor gewone euro's? Met andere woorden, hoeveel waarde is er weer uit het systeem gehaald?

(F) Hoe ziet de toekomst eruit voor *currency*? Liggen er grote veranderingen in het verschiet? Wat zijn de gestelde doelen qua aantal deelnemers? Potentiële samenwerkingen?

(U) Zouden er, in jouw ogen, zaken veranderd moeten worden? Zijn er mogelijke samenwerkingen waarvan je vindt dat die er moeten komen?

(F/U) Afsluitend, zie jij alternatieve valuta een belangrijke rol spelen in de toekomst? Denk je dat zulke initiatieven wijdverspreid kunnen en zullen zijn en hoe ziet dit eruit? Heeft iedere regio of stad zijn eigen munt? Zijn deze verschillende munten inwisselbaar? Of zijn alternatieve valuta gericht op specifieke thema's een vruchtbaarder idee?

(F/U) Tot slot, heb je er bezwaar tegen als deze vragen en jouw antwoorden worden uitgeschreven en als bijlage worden toegevoegd aan mijn scriptie? Uiteraard met de garantie dat er niks wordt veranderd aan je woorden.

(F/U) En is het oke als de scriptie, inclusief dus dit interview, wordt gedeeld met anderen? Zo kan ik me voorstellen dat andere mensen die ik interview ook interesse hebben in een versie van de scriptie.

English

Regarding the interview. In the end, I am looking for answers to certain questions. These questions will be aimed at examining in a qualitative way what the potential of community currencies is to realize social, economic or environmental benefits. The questions I would like to have answered are questions based on academic literature, specifically a study from Graugaard about the Lewes Pound. In this study, Graugaard developed a framework with indicators and related questions in order to study the effects and impacts of the Lewes Pound. I adapted this framework for the Dutch situation and by using this framework I am hoping to draw conclusions about the potential of community currencies to bring about benefits. This interview is part of a case study into *currency* and will be combined with two other case studies into *currency* and *currency* to draw some general conclusions about the potential.

So, in the end I have certain questions I would like answered, but during the interview I will ask further if you mention something that might be relevant for the study or if it triggers me, as I also find this topic very interesting. This means I something have to jump back to the main questions, which I will try to do as smoothly as possible.

So, let's start of with some introduction questions before getting to the impact part of the interview.

(F) In what year was *currency* introduced?

(U) In what year did *user* start using *currency*?

(F) In what year did the idea come up to create *currency?*

(F) And how did this process go between the first idea and the actual initiation of *currency?*

(F) Can you describe what the objectives of *currency* are?

(U) Can you describe what the motives of *user* where to join *currency?*

(F) Can you describe how you think that *currency* reaches these objectives?

(F) Are these objectives shared among all participants or are there other considerations to join *currency?*

(F/U) Could you rank social, ecological and economic objectives based on their priority?

(U) What percentage of income and expenses of *user* are in *currency*?

(F) How many participants does *currency* currently have?

(F) What kind of participants are these? Are these all businesses, or are there local government bodies involved or ngo's? How about individual consumers?

(F) Do you foresee any changes in this composition of participants? Are there possibilities to set up new partnerships? Think for example of certain currencies which local public bodies use to reward individuals for their good behaviour, for example in terms of separating waste .

I would like continue to the effects of *currency*. Some questions may be difficult to answer based on your perspective or based on the short amount of time the currency is active, but just try to answer to your best knowledge, your perspective is currently just what I´m looking for.

(F/U) Do you think participants more often search for products and services in the network? Do they first check if what they are looking is available in the network?

(F/U) In other words, could this mean consumption is more local?

(U) With what kind of participants do you most often trade in *currency*? Are these individual users or businesses?

(F/U) Do you think *currency* increase the revenue of the participants? Or did the revenue remain the same, but did the share of the revenue that is *currency* increase?

(F/U) Do you think the feeling of connectedness increased between the participants? If so, can you give an example of ways in which you notice this?

(F/U) If it increased, would you say this is an effect of the usage of the currency or was this feeling something that already existed?

(F/U) Do you feel the use of *currency* contributes to awareness about the weaknesses of the conventional money system? If so, in what area do you see this awareness most, social, economic or environmental?

(F/U) Do you think the use of *currency* strengthens the local identity?

(F/U) What are obstacles or barriers that are experienced when using *currency?*

(F/U) In what way could these barriers be overcome? What could go better and how?

(F/U) The other way around, what are the key motivations or advantages you've experienced by using *currency*?

(F) How many *currency* circulated last year? Or in total?

(F) If possible, how many *currency* are converted back to real money? In other words, how much value is re-extracted from the network?

(F) How does the future of *currency* look like? Are there big changes ahead? What are the goals in terms of number of participants? Are there possible partnerships in the future?

(U) Are there, in your opinion, partnerships that could or should be established?

(F/U) Concluding, do you see community currencies playing an important role in the future? Do you think such initiatives are widespread en how would this look like? Does every region or city have its own currency? Can these different currencies be exchanged? Or are currencies based on specific themes a better idea instead of place-based currencies?

(F/U) Finally, do you object to these questions and your answers being written out and added to my thesis as an appendix? Of course, provided your answers are written out unchanged.

(F/U) And do you object to my thesis, and thus your answers, being shared with other interviewees?