

Spring 2018

The Path to Mainstream Finance: Exploring Complementary Currencies and Interest-Free Lending

Ema Di Fruscia
SIT Study Abroad

Follow this and additional works at: https://digitalcollections.sit.edu/isp_collection

 Part of the [Finance Commons](#), [Finance and Financial Management Commons](#), [Growth and Development Commons](#), and the [International and Area Studies Commons](#)

Recommended Citation

Di Fruscia, Ema, "The Path to Mainstream Finance: Exploring Complementary Currencies and Interest-Free Lending" (2018). *Independent Study Project (ISP) Collection*. 2803.
https://digitalcollections.sit.edu/isp_collection/2803

This Unpublished Paper is brought to you for free and open access by the SIT Study Abroad at SIT Digital Collections. It has been accepted for inclusion in Independent Study Project (ISP) Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

Running title: THE PATH TO MAINSTREAM FINANCE

The Path to Mainstream Finance:

Exploring Complementary Currencies and Interest-Free Lending

Ema Di Fruscia

SIT Switzerland: Banking, Finance, & Social Responsibility

Acknowledgements

This research was supported by my professors, lecturers, and peers at the SIT: Switzerland Banking, Finance, & Social Responsibility program, especially Goran Jovanovic. In addition, I was greatly aided by those individuals who were generous with their time and thoughts and allowed me to conduct interviews with them. I thank my colleagues, Zoë, Paula, Evan, and Ike, as well as my mentor, Marianne, and President, Jean at Monnaie Léman, who provided insight and expertise that greatly assisted the research.

Table of Contents

Abstract	3
Focus Project Question / Objectives / Justification	4
Context and Literature Review	5
Methods	11
Ethics	12
Observation and Analysis of Internship Organization	13
Observation and Analysis of Focus Project	17
Conclusion	21
Bibliography	23

Abstract

This paper explores elements of alternative finance including complementary currencies, credit clearing systems, and Islamic Banking practices. I begin first by outlining the issues created by the mainstream western banking model, including wealth inequality, socioeconomic discrimination, environmental degradation, and the collapse of small businesses and local economies. I go on to introduce and define the concepts of complementary currencies, Local Exchange Trading Systems, and credit clearing systems; I argue that these systems challenge the popularly held perceptions that currencies and mainstream banking practices in general are immutable, given, or ideal. To support this assertion, I transition into my research findings first by describing the research methods and experiences that have led me to hold these beliefs. I recount the details of a 5-week internship with Geneva-based complementary currency association Monnaie Léman, where I gained valuable exposure to concepts and structures associated with this field. Finally, I discuss my research findings as related to both complementary currencies and interest-free lending in credit clearing systems. I argue that among the greatest barriers in the way of success for such systems is publicity and public trust. I go on to argue that interest-free lending has proven to succeed through credit clearing systems as well as in Islamic Banking and should therefore be explored further. This paper as a whole serves to inform on the subject and encourage the inclusion of alternative financial systems, primarily complementary currencies and interest-free lending.

Focus Project Question / Objectives / Justification

The notion that currencies are in fact flexible is increasingly taking root in people's minds. The perception that a national currency, or our money, is an unshakeable and irreplaceable tool of civilised humanity has taken hold of many over generations of time, especially those in countries with highly stable governments and reputations for powerful currencies. For many others, a government-controlled currency does not so much represent a *given* as it does the *best possible option for running an efficient society*. In either case, national currencies are not often challenged. The rise of new technologies and cryptocurrencies, such as the Blockchain and Bitcoin, has paved the way for many minds to accept the thought that national currencies may not be the only, nor the best option for efficiently and securely conducting transactions; however, it would be incorrect to attribute this idea to these technologies alone. In fact, thousands of communities around the world have already been practicing the use of alternative, or complementary currencies and systems of exchange. These systems come in a number of forms, and for a number of purposes; however, they all come into existence to fill in the gaps left by the traditional system. Out of complementary currencies we may derive more complex systems, such as credit clearing systems, which further challenge traditional practices. For my focus project, I intend to explore the alternative side of currencies and lending practices in order to argue that, though these systems have not entered the mainstream, they nonetheless have immense potential to strengthen local economies. Specifically, I want to answer the following questions: To what extent can complementary currencies address the issues presented by the current dominant system? To what extent can interest-free lending, a characteristic of credit clearing systems, create more equitable financial

environments? To answer these questions, I rely on both primary and secondary research.

Through the course of a 5-week internship at a complementary currency office in the Lake Geneva region, I've gained access to valuable experiences, information, and connections that have enriched my understanding of the subject. I intend to integrate what I have learned about complementary currencies from this internship with what I have learned through traditional research and lectures. To fortify my argument, I intend to tie the conversation surrounding interest-free lending in a mutual credit system setting with the subject of Islamic Banking to prove the merits of this controversial characteristic. My objective is to shed light on these lesser-known systems and argue that they have already demonstrated and have the potential to continue to demonstrate their abilities to address issues that the traditional system cannot. It should be emphasized that this paper does not advocate for a full renunciation of the traditional system; rather, it seeks to challenge the assertion that the tools which dominate the current system are the sole options, and examine the potential impact of the integration of alternative tools into mainstream economic practices.

Context and Literature Review

Western processes surrounding banking, money creation, and economic growth rarely stray beyond what has traditionally been most prevalent: a capitalist system that prioritizes efficiency, competition, and growth above all. While this system has been highly effective in accomplishing what it was designed to achieve, it has also led to a number of significant issues. Among them are extreme wealth inequality, environmental degradation due to the system's reliance on a linear economy model, and weak social structures for those who need them most. In addition, the capitalist model is directly linked to globalisation and a shift in reliance away from

small, local businesses and toward large, transnational corporations and mega agricultural producers. Money creation and banking practices have developed to complement this system in a number of ways, many of which further exacerbate the issues presented. This is not to say that current practices ought to be rejected completely; rather, that the exclusive use of mainstream currencies and means of banking which dominate political and economic discourse effectively draws unnecessary boundaries around what is possible.

A significant example of a perceivably irrevocable characteristic of modern day lending practices is interest collection. Both basic and advanced economics theories in the western world describe the current system of lending and borrowing *with interest* as unique in its ability to create money, expand business, and maximize economic potential for an individual, business, or state (von Böhm-Bawerk). This system — of borrowing money from a bank or lender, usually for the purpose of funding a business investment, and later repaying the principal sum as well as any accrued interest — does provide a number of benefits. For example, interest acts as an incentive for potential lenders to lend their unused funds in that it essentially “pays” them to lend (Interest Rate). In theory, this allows for more borrowers to gain access to credit which they otherwise would not have had, and therefore for more businesses to develop and an economy to grow. However, the advantages provided by this system cannot be said to be unique to it, and the disadvantages of interest-charging should not be ignored.

One of the most significant weaknesses of the traditional interest-based lending system is that it favors those who have already acquired wealth and disadvantages those who have not. This is made apparent through two principle ways, the first being the dispersion of risk. In a traditional loan contract, the risk is borne almost solely by the borrower, while the

capital-owning lender bears little-to-no risk. This is demonstrated by the fact that the borrower must absorb the full consequences if the investment he/she made with the borrowed funds is unsuccessful (for example, if the business that the borrower used the loan to fund is not profitable, the borrower must still repay the loan and any accrued interest, despite decreased ability to do so). The second principle characteristic of traditional interest-based lending that renders it unfavorable to those without capital is the variance of interest rates. While the interest that a borrower must pay varies according to a number of complex factors, such as credit history, assets, and risk, the general rule is that a borrower faces a higher interest rate if he/she has a lower likelihood of repaying the loan (Pinyo). Those who already have capital, therefore, are deemed to be at a lower risk of default and are provided access to cheaper credit. Meanwhile, those with little-to-no credit must face higher interest rates, or credit at a higher price. This traditional credit lending system creates an environment which fosters the continuation and expansion of wealth inequality; those that have wealth are largely safe from losing it, whereas those that lack wealth must risk immense consequences in the process of earning it.

In addition to disadvantaging those with less wealth, interest-based lending practices can be linked to a number of other issues. For example, the imbalance of risk has the potential to create a moral hazard issue on the part of the lender. A capital-owner who is guaranteed to be returned his/her funds, plus interest, regardless of the borrower's success (except in certain cases, such as if the borrower declares bankruptcy) is less likely to consider carefully the investment before lending money, and could, in theory, contribute toward investments that are ill-planned and likely to fail (John, Shoven B, et al.). Interest, too, is related to predatory lending, a practice in which a lender provides loans in unfair or deceptive ways to take advantage of a borrower. We

have observed such patterns of reckless lending, for example, leading up to the 2008 financial crisis. The provision of loans to borrowers who were at high risk of default while charging extremely high interest rates was a major contributing factor in the collapse of the housing market and the recession that followed (Financial Crisis Inquiry). It is clear that, though charging interest can contribute toward a successful and efficient financial system, it also has the potential to do the very opposite. Interest collection is only one aspect of the mainstream financial system; there are many more elements which similarly provide costs and benefits to participants. While some major improvements have been made to improve this system, it would be unwise to ignore alternative and complementary options.

One such option comes in the form of challenging mainstream money practices at their core by placing into question the exclusivity of the money that is used to conduct them; in other words, the currencies. Doing so, for many, involves shattering the subconscious assumption that currencies, as they exist today, are unshakeable and genuinely valuable. Antonin Calderon, General Secretary at Monnaie Léman, brings up the fact that, in truth, most of today's currencies are "just paper" guaranteed by the federal government. He makes the argument that the only difference between the pages of a book and the money we use is the fact that we have faith in the value of the money. Accepting this truth creates the opportunity to explore new and different approaches to money and opens the doors to complementary currencies. Complementary currencies can be defined as non-legal tender which are privately created to be used alongside national currencies, usually to accomplish some or all of four main objectives: "To promote local economic development; To build social capital; To nurture more sustainable lifestyles; To meet needs that mainstream money does not" (Fontinelle).

Complementary currencies exist in a number of forms, and this paper will go over three. The first is simply alternative physical money; that is, bills, coins, certificates, etc. which are exchanged and traded in the same way that mainstream money is. This form can be equated to gift certificates or vouchers, which are essentially currencies accepted only by select businesses. Perhaps the most well known example of this form is the “BerkShare” in Massachusetts, USA. This currency is designed to be accepted by a network of over 400 local businesses in the Berkshire region, and provides a 5% discount to consumers as an incentive (“What Are BerkShares”). The second form a complementary currency can take is known as a Local Exchange Trading System, or “LETS.” This system does not actually use a physical currency; rather, it utilises a platform, often online, to create networks of individuals who can trade their goods and services with one another; often, the unit of measure, or currency, is time. For example, Person A could trade one hour of babysitting for one hour of Person B’s tax filing services. Finally, the third type of complementary currency is known as a credit clearing system. This issuance mechanism is similar to the LETS; however, it involves the peer-to-peer exchange of credits among businesses (versus individuals) without the need of an initial loan from an issuing authority, such as a bank. Instead, all traders in the system are allowed to lend and borrow from one another, regardless of the credits in their accounts. The main distinguishing characteristics of this system are that traders can hold negative balances and still be legitimate, that exchanges are not limited to traditional barter two-party transactions (in other words, Person A can provide Person B with a service in exchange for credit to gain a service from Person C) and, notably, that exchanges are made free of interest (“Mutual Credit”). This means that users of such systems essentially gain access to free credit. Credit clearing systems, therefore, are based

on egalitarian principles in that all players have equal access to credit; this is among the most controversial aspects of this system, and also among the strongest (Jiangpo). Each of these systems bears unique characteristics, but each demonstrates the flexibility of and potential within modern day currencies. These systems, too, offer the opportunity to study and integrate other non-mainstream banking practices, such as interest-free lending.

To learn more about complementary currencies and mutual credit systems, I interned with an organization specializing in this field for five weeks. The name of the institution is Monnaie Léman, a French name meaning “Currency of the Léman.” The primary functions of Monnaie Léman are the development, management, and promotion of their complementary currency, the Léman, throughout the Lake Geneva region of France and Switzerland. According to its charter, the main functions of the Léman are as follows: to attract and retain economic activity to the local area through the prioritization of spending at local businesses; to facilitate solidarity among local businesses, enterprises, and producers; to encourage spending at businesses who demonstrate sustainable practices (particularly those supporting local and organic agriculture, high job creation, and minimal environmental impact) (“Charte du Léman”). Both individual consumers as well as businesses in the region are allowed and encouraged to make purchases and exchanges with the Léman.

There are two basic processes to participate; the first, which is open to individuals as well as businesses, is known as “pledged currency” and involves the exchange of national currency (Swiss Francs or Euros) for Lémans (as either physical cash or digital currency). This currency can be used to make purchases at any of the 428 businesses that accept it in the region, who in turn use it to conduct business (i.e. to pay their employees or trade with other Léman-associated

entities). In this way, the Léman circulates through the local economy multiple times while funding only ethical, sustainable, and local ventures. In addition, the national currencies (Swiss Francs or Euros) that individuals exchange for Lémans are deposited into Alternative Bank Switzerland, a bank which invests only in sustainable projects. This ensures that participating in the Léman economy yields only positive impacts in the community. The second process is open only to businesses, and is available only digitally: it is the credit clearing system, also known as the LEMANEX. It works in the same way that traditional credit clearing systems work, as explained earlier in this paper. Monnaie Léman's main purpose for using this system is to expedite business-to-business interaction in the region and encourage local partnerships and solidarity ("Comment Ça Marche ?").

Methods

In order to successfully explore the merits and drawbacks of complementary currencies and interest-free lending practices, I have utilised multiple research methods. Beginning in late March of 2018 and working until early May, I conducted traditional secondary research based on academic journals, studies, and media sources found online. While conducting research via this method is usually relatively straightforward, it was important to carefully analyse my sources to ensure credibility. This particular method revealed the most about the interest-free lending component of the project. I gathered information, as well as the inspiration for this research, through lectures received as part of the program's Alternative Financial Systems course throughout the month of March. A portion of my research was gathered through the observation of the structure and practices of Monnaie Léman while I interned there in April and May of 2018. The final mode of research which I employed was primary, based on interviews that I

conducted in late April. Specifically, I conducted three separate interviews with experts in the field and users of complementary currencies: the first was with the owner of a restaurant that accepts the Léman; the second was with a supporter and potential client of the Léman; the third was with the Secretary General and representative of Monnaie Léman. While I attempted to contact individuals who could answer questions about interest-free lending and Islamic banking practices, I was unable to do so. Therefore, the majority of the data that I gathered through the interviews is related to the use of complementary currencies, specifically the Léman.

Ethics

While conducting and extracting information from interviews, it was extremely important to consider and abide by ethical research practices. The most important factor to consider when working with human subjects is that my primary responsibility as a researcher was ensuring the safety and respect of those I was studying. This involved being highly transparent with the purpose of the interviews, ensuring that the subjects understood that their participation was voluntary, providing the option for the subjects to remain anonymous if they so chose, and behaving in a way which was unbiased and respectful of the subjects and of their experiences. It was vital that the subjects did not feel pressure to respond in certain ways (i.e. to self-censor), that their confidential information was not shared, and that the overall experience was comfortable, engaging, and mutually beneficial. I made sure to follow these guidelines when conducting my interviews, and I believe that doing so was not only beneficial for the subjects I was studying, but also for the quality of the information I gathered. In order to respect her wishes for anonymity, I have changed the name of one of the subjects. Conducting this research in an ethical manner was quite easy given the guidelines; in addition, the focus of the interviews rarely

strayed into personal or sensitive issues and was, for the most part, an easy topic to discuss openly.

As an American student interning with a Swiss organization, my positionality had the potential to make an impact on my research and overall experience. For example, my experience surrounding money has likely been different from that of many Swiss and/or European people. In the US, where a more extreme form of capitalism reigns, using a potentially less efficient means of conducting business (such as with a complementary currency) may seem strange. By contrast, Europeans tend to have stronger social system, and a greater ease with making decisions which put the community first. While I myself tend to lean more toward the European way of thinking, it was important for me to be aware of this cognitive bias that stems from my upbringing.

Observation and Analysis of Internship Organization

As an intern with Monnaie Léman, I participated in a variety of projects. The first involved conducting research in order to create a comprehensive list of all known currencies in the world. In addition to listing them, however, part of the task involved writing brief reports on each one (i.e. the region where it is active, the principle objectives of the currency, its success in achieving these goals, whether it has membership fees, the type of currency used, etc). This project allowed me to gain immense insight into the world of complementary currencies. I learned that there are an estimated 6,000 different complementary currencies in the world, though many are informal and likely unrecorded (Fioramonti). Of those that I researched, I found many Local Exchange Trading Systems where users could trade units of time. The majority of these systems listed community solidarity and economic inclusivity as their main objectives, though there were many others who listed additional goals, such as sustainability. Working on

this project revealed just how many complementary currencies are currently being used all over the world; considering the fact that these systems of exchange are not considered “mainstream,” they certainly have a significant impact on many people. In addition to gaining valuable information on this subject, contributing to this list allowed me to improve my skills in efficient and accurate research, concise and in-depth reporting, and problem-solving.

Another project to which I contributed significantly involved translating a number of Monnaie Léman’s documents from French to English. This project had as its primary objective the facilitation of dialogue between Monnaie Léman and other, similar organizations in the UK for the purpose of potential collaboration. Monnaie Léman has a long term goal the creation of a mobile application that would have the capability to accept every currency in the world (including official currencies, complementary currencies, and even temporary / event-specific currencies). The purpose of this venture is largely to improve access to different currencies in order to encourage their increased use. In addition to the realization of the digital and legal aspects, the success of this undertaking relies heavily on collaboration with others involved in the sector of complementary currencies. As an intern, I played a large role in assisting the progress of communication for Monnaie Léman. To my benefit, this task strengthened my French language skills, especially in formal writing. Though I already speak French comfortably, translating these documents proved to be quite challenging. I quickly learned that direct translations are often insufficient, and that, in order to successfully communicate an intended message, I needed first to understand the purpose of what was being said. Armed with this deeper form of comprehension, I was able to regenerate the message in English in a way which actually made sense, as opposed to relying on unclear direct translations. Though challenging,

this project also allowed me to become familiar with Monnaie Léman's structure and communication strategies.

In addition to gaining exposure to this information, interning at Monnaie Léman allowed me to observe the impact on the community that this organization has. It is apparent that it has as its primary function the development and embetterment of the businesses and inhabitants of the region. Those that work for Monnaie Léman do so out of passion for the cause and a desire to do good for the local community; in fact, most of Monnaie Léman's associates are volunteers who choose to donate their time to the development of this cause. On the side of the users of the Léman, I observed the same phenomenon. While accepting the Léman at a business can provide some financial benefits on an individual level, such as from increased clientele, this increase is not significant enough to serve as the main incentive; the advantages are instead social and community-based. A conversation with owner of the Café du Grütli, Anne, revealed this sentiment. She described her pride in accepting the Léman, and the efforts that she has made to find and convince business partners to accept the Léman as well. For her, the Léman serves to create a sense of community: "if someone uses the Léman, it says a lot about them and their values... people are very proud to pay with the Léman." It is clear that the Léman goes beyond creating long term economically advantageous conditions; it affects people's social and communal lives as well. It is evident that those who participate in this alternative system, whether as volunteer employees, or as business owners, are passionate about their communities and confident in Monnaie Léman's approach to ameliorate it.

Even with a positive objective and a number of supporters, however, Monnaie Léman still faces some significant challenges. It's greatest weakness, as I observed it, had to do with its

marketing and communication strategies. Some areas are more successful than others. Anne, for example, said that she receives approximately 500-1,000 Lémans per month as payment in her restaurant. The owner of Lilly's Green Market in Nyon, however, has been accepting the Léman for about one year and has never had anyone actually use this currency in her shop. I spoke, too, with Monica, a regular supporter of alternative and community-focused ventures in the Lake Geneva area about Monnaie Léman. She told me that, after hearing about Monnaie Léman, she was very intrigued by the concept; however, she noticed after numerous conversations with friends that very few people realize that it exists. "Even people who are normally in the loop about alternative programs like this" aren't aware of Monnaie Léman's presence. Monica noted, too, that a visit to the website of Monnaie Léman did not reassure her of this organization's legitimacy in that it "didn't appear very well-made." While an attractive website and a positive word-of-mouth reputation may not be accurate measures of an organization's core principles, objectives, or structure, these factors clearly make a significant impact on its ability to progress, especially in this particular field. As mentioned earlier in this paper, the vast majority of currencies are given value purely by the faith of its users. Without a perception that the Léman is a stable, trustworthy, and reputable currency, even its greatest potential supporters may be deterred from participating in Monnaie Léman's system.

On the business level, gaining increased publicity is also vital. Antonin explained that, in the case of the credit clearing system, success depends fully on the participation of enough companies; with only a few businesses involved, offering a limited stock of goods and services, it is not practical to participate in this system. Antonin estimates this "critical mass" number to be around 100-200; Monnaie Léman currently has about 30. With this in mind, it is evident that

one of Monnaie Léman's greatest challenges and most important objectives should be to make itself better known in the region. However, it should also be acknowledged that Monnaie Léman was established in 2015 and is therefore a very young organization. Given more time, it's possible that its presence will be made more apparent.

Observation and Analysis of Focus Project

When discussing complementary currencies with a Jean Rossiaud, President of Monnaie Léman, he made sure to stress the word “complementary” and the lack of the word “alternative.” This is because complementary currencies arise to *complement* and not *replace* pre-existing official currencies and banking practices. They are designed not to act as a convenient one-size-fits-all economic tool, but as a mechanism to address one or more specific issues faced by a community or region. Therefore, it is no surprise that complementary currencies are, in theory, ideal solutions for many of the issues presented earlier in this paper. Potential strategies to fight wealth inequality, environmental degradation, and too-weak social structures can each be found within the designs of complementary currency, Local Exchange Trading, and credit clearing systems. By participating in the Léman economy, for example, a person simultaneously contributes toward strengthening local businesses, supporting sustainable projects, and providing interest-free credit in a solidarity-driven network. In addition to encouraging the initial investment in a local business, using the Léman forces the wealth to remain in the local economy for a longer period of time. Antonin Calderon discussed this point, citing the theory that one Swiss Franc spent in the region would circulate through an estimated 2-3 hands before leaving the region (i.e. by being spent at a larger, non-local retailer); meanwhile, one Léman would circulate through an estimated 6 hands before leaving. This effectively means that more

businesses, and therefore people, in the region would reap the benefits of a purchase made using a Léman. It is clear that complementary currencies have the potential to contribute toward creating economically vibrant and resilient communities; however, moving this theory into the realm of reality proves to be challenging.

Monica's experience with complementary currencies is not atypical. Among the greatest barriers facing these systems is a combination of the public's lack of information and a lack of trust in the system. If potential participants in the system do not understand its advantages, lack confidence in its reliability, or do not even know that it exists, a complementary currency has a very low probability of being integrated into mainstream practices. It must be acknowledged that choosing to use a complementary currency does, at least initially, involve sacrificing some amount of potential efficiency. The additional personal time and effort demanded to acquire the currency and find businesses that accept it is too significant to be excused by the long term benefits to the community for many people. In fact, proponents of such systems have made the argument that the most effective way for a complementary currency to gain significant traction is by government requiring that it be used to pay a tax (Peacock). However, this would necessarily dismantle the characteristic that most distinguishes these currencies in that it would remove the currency from the hands of local businesses and consumers and enter back into the hands of a large government entity. Therefore, when analysing the future prospects of complementary currencies, it is reasonable to assume that they will remain outside of mainstream financial tools and at a relatively small scale. However, it is possible that a simple shift in convenience could tip the scales; endeavors like Monnaie Léman's proposed all-currency-accepting mobile application may prove to be invaluable to the success of complementary currencies.

Credit clearing systems, though they rely on a model which feels even less familiar than that of complementary currencies, provide greater financial incentives; this may prove to make all the difference in their relative success. Interest-free credit represents the greatest of these financial incentives. Antonin provided a personal experience to demonstrate how this can be beneficial. He and his partners decided to open a small food shop together, and did so with little capital to begin with. As Antonin put it, “you have to buy your goods and services before you can sell them;” in other words, they needed capital to stock their shop for the first time, in order to have goods to sell to customers. They used the LEMANEX credit clearing system to acquire the goods they needed (mostly food products from a local grocer, in addition to a few supplies, all of which was available through the local network), amounting to about 2,000 Lémans. This placed their LEMANEX account at a — 2,000 Léman balance; recall, however, that a negative balance is still legitimate in this system. Antonin and his business partners were able to open their shop to the public and begin conducting business. While their business slowly gained traction, they became better able to repay the credit they had initially borrowed to open it, and they never had to worry about repaying accruing interest in addition. The opportunity for a business to gain access to interest-free credit is highly advantageous and not at all common, making credit clearing systems potentially highly sought-after mechanisms. Individuals who may have had the desire to open businesses, but who could not due to a lack of credit, are provided with the opportunity to do so; this transforms the system to become significantly more egalitarian.

This system was inspired, in part, by the interest-free nature of Islamic Banking. This system of banking, though uncommon in the western world, is undeniably mainstream in many

countries. Islamic Banking is essentially a financial system that follows Sharia Law; this comes with a number of different requirements, including the prohibition of investing in a number of domains. For the purposes of this paper, however, the relevant prohibition is that of interest. According to Islamic Banking, charging interest is unjust in that it involves making money without effort; in addition, it places all the risk on the person without capital while placing almost none on the capital-owner. This is why, in this system, a capital owner who wishes to lend their funds takes instead partial ownership of the investment made by the borrower. For example, if an investor or bank provides funds to an individual for the individual to open a business, the investor or bank will own a portion of this business. This effectively serves as an incentive to lend capital; in addition, it addresses the moral hazard issue associated with interest described earlier in this paper in that it effectively forces investors to consider carefully the investments that they make. This is because, by lending money, they share in the risk of the borrower. If the business does not succeed, both the lender and the borrower bear the consequences. It is clear that the Islamic Banking system addresses many of the issues associated with the traditional western banking system. In addition, Islamic banks were observed to be largely unaffected by the 2008 global financial crisis — a particularly impressive feat, considering this crisis touched banks all over the world (Warwick-Ching).

Islamic banking is certainly becoming more prominent in western countries, especially those in Europe; however, it has yet to compete in a significant way with mainstream practices. This is likely due to the fact that it involves more than interest-free lending; the other, more religiously-specific elements of this system have the power to deter non-Muslim communities from participating. Nonetheless, mainstream traditional banking should take note of the

resilience and strength that Islamic banking has demonstrated and become more open to adopting certain elements. Credit clearing systems are, in a way, an attempt at accomplishing this. However, credit clearing systems are only open to business to business transactions; they do not allow for individuals to perform similar exchanges. This makes sense: in a credit clearing system, goods and services serve as the units of exchange; this necessarily means that those involved must have the ability to provide a significant enough quantity of a good or service and must, therefore, be a business. Finding a middle point between these two worlds — a system which includes the interest-free lending model, minus the Islam-based regulations as well as the business exclusivity in participation — proves to be challenging. However, the successes of these systems should encourage us to seek this solution. It is apparent that interest-free lending has succeeded and can continue to succeed. For greater wealth equality, stronger businesses, and more resilient economies, we must challenge the perception that interest is a necessary component of modern banking practices.

Conclusion

Interest-free lending, like complementary currencies, are elements of alternative finance which, though gaining traction, have far to go before entering mainstream banking practices. These systems, however, should not be ignored. It is evident that traditional systems are proving to be less than infallible; the issues to which they have led, and continue to lead, such as rising wealth inequality, socioeconomic discrimination, environmental degradation, and the collapse of small businesses and local economies cannot be combated with the same systems that caused them. It is vital that businesses and individuals gain more information about and accept these alternative concepts surrounding non-mainstream banking. This is easier said than done; before

interning with Monnaie Léman, I myself had never heard of complementary currencies or credit clearing systems. As I learned more about it, though, the idea went from audacious to undeniable. I observed the power that communities have, and the initiative that people demonstrate when working in ways that align with their values. In a profit-driven society, it can be easy to forget that people do in fact care about more. This experience, more than providing me with research and translation skills, or information on complementary currencies, has demonstrated the vast potential for change that still exists in a seemingly immutable society. The questions that rest are how exactly these alternative systems — which are currently on the sidelines of financial discourse — will reach the point at which they will be allowed to flourish to their full potential.

Bibliography

- “Charte Du Léman.” *Monnaie Léman*, 10 Nov. 2015. Retrieved April 6, 2018, from monnaie-leman.org/charte-du-leman.
- “Comment Ça Marche ?” *Le Léman | Votre Monnaie*, Monnaie Léman, 4 Feb. 2016, Retrieved April 6, 2018, from monnaie-leman.org/comment-ca-marche/#Guide.
- “The Financial Crisis Inquiry Report.” *The Financial Crisis Inquiry Commission*, Jan. 2011, Retrieved April 6, 2018, from www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf.
- Fioramonti, L. (2018, May 05). Alternative currencies are the future: Why it matters for development. Retrieved April 27, 2018, from <https://theconversation.com/alternative-currencies-are-the-future-why-it-matters-for-development-80036>
- Fontinelle, Amy. “An Introduction To Complementary Currencies.” *Investopedia*, 8 Aug. 2011, Retrieved April 7, 2018, from www.investopedia.com/articles/economics/11/introduction-complementary-currencies.asp.
- “Interest Rate.” *Investopedia*, 26 Feb. 2018, Retrieved April 3, 2018, from www.investopedia.com/terms/i/interestrates.asp.
- Jiangpo, Peng. “The Credit Guarantee System of Medium-and-Small Enterprises Based on Mutual Guarantee.” *CNKI*, Feb. 2008, Retrieved April 6, 2018, from en.cnki.com.cn/Article_en/CJFDTOTAL-JRYJ200802010.htm.
- John, Shoven B, et al. “Real Interest Rates and the Savings and Loan Crisis: The Moral Hazard Premium.” *National Bureau of Economic Research*, NBER, June 1991, Retrieved April 6, 2018, from www.nber.org/papers/w3754.

“Mutual Credit.” *Community Currency Knowledge Gateway*, Community Currencies in Action, community-currency.info/en/glossary/mutual-credit/.

Peacock, M. S. (2014, September 23). Complementary currencies: History, theory, prospects.

Retrieved April 22, 2018, from

<http://journals.sagepub.com/doi/10.1177/0269094214553174#articleCitationDownloadContainer>

Pinyo. (n.d.). Why Borrowers with Bad Credit Pay a Higher Interest Rates. Retrieved April 30, 2018, from

<http://www.moolanomy.com/579/why-borrowers-with-bad-credit-pay-a-higher-interest-rates/>

von Böhm-Bawerk, Eugen. “Capital and Interest: A Critical History of Economic Theory.”

Retrieved April 6, 2018, from *Online Library of Liberty*, Liberty Fund, 1884,

oll.libertyfund.org/titles/bawerk-capital-and-interest-a-critical-history-of-economic-theory.

Warwick-Ching, L. (2014, July 14). Beginners' Guide to Islamic Finance. Retrieved April 19,

2018, from <https://www.ft.com/content/8c9bc2fc-8845-11df-a4e7-00144feabdc0>

Wee, Samuel. “Islamic Finance & Banking.” *Alternative Financial Institutions & Intermediation*.

Class Lecture, 15 Mar. 2018, Nyon, Switzerland.

“What Are Berkshares?” *BerkShares Inc.*, Retrieved April 6, 2018, from

www.berkshares.org/what_are_berkshares.

Interviews

Monica, April 26th, 2018, 25 minutes, Geneva

Anne, May 2nd, 2018, 20 minutes, Café du Grütli, Geneva

Owner, Lilly's Green Market, April 26th, 2018, 10 minutes, Nyon

Antonin, May 3rd, 2018, 35 minutes, Monnaie Léman, Geneva

Monnaie Léman Internship Journal

03 April 2018

Today was the first day of our internship at Monnaie Léman. Seeing as it's the week following Easter, our schedule has been slightly modified, and so we're beginning on a Tuesday. Our mentor and coordinator, Marianne Schirato, welcomed us this morning and showed us around the office. She has assigned us two main projects: the first is to continue contributing to a spreadsheet that will eventually contain information on every currency in the world; the second is to translate documents from French to English for the purpose of facilitating communication between Monnaie Léman and potential collaborators in the UK and Germany. Today I began working on this second project. The documents which I've been translating designate the steps to integrating the Léman and the LEMANEX (mutual credit / digital currency) for the purpose of information and promotion. Tomorrow, we will come in to the office in the morning, where I'll continue translating documents and, most likely, receive more projects from Marianne.

04 April 2018

As today is a Wednesday, and we have class in Nyon in the afternoon, we're only here at Monnaie Léman for the morning. Today, we spent some time talking with Marianne about the local area in general, which was interesting. After, I continued the project of translating documents from French to English. This has been more challenging than I anticipated, as I'm not used to some of the formal language that is used in French; however, with the help of translation sites, I've been able to accurately translate everything I've needed to. I plan to continue

translating documents tomorrow from home, as well as to begin contributing to the list of currencies.

05 April 2018

Today I worked from home, as no one was in the office. As planned, I spent my time translating the document that I had started at the beginning of the week. I was able to finish this task with the help of Zoë. Me and the other interns discussed the work that still needed to be done on the Excel spreadsheet, and decided that we would work on it together. Working at home was nice because I was able to start working around the same time of day as I normally would (around 9:30 am) without the 1.5 hour commute each way.

09 April 2018

This morning we came into the office and set ourselves up in our office. Marianne touched base with us, and we let her know that we finished the translation task and moved on to the spreadsheet. We met the rest of the office during their meeting, and set up a meeting with Jean to discuss the work we'll be doing here from now on. He also let us know that he would be providing us with our own key to the office. During my downtime, I began looking more into information on mutual credit systems for my final paper. Tomorrow Jean will provide us with instructions for our next tasks.

10 April 2018

This morning we met some more members of Monnaie Léman, who told us they were working on getting the currency represented at a local film festival. After, we continued working on the spreadsheet of the world's complementary currencies, as well as discussed the possibility of making a LinkedIn page for Monnaie Léman.

11 April 2018

As it's a Wednesday, we are only here for the morning. Marianne told us we would have a meeting this morning before leaving, though we have yet to do so. We continued to work on the complementary currency document, and I continued to read the documents that we were given.

12 April 2018

Today we worked from home. I continued working on the complementary currency spreadsheet and was able to add information on more complementary currencies. I'm learning that many of the currencies already on the list are not actually currencies, but time barter systems. One challenge that I've continually faced has been the fact that many of the websites are written in a different language (mostly German). While Google can translate the website, it cannot translate the PDF documents that often contain the information I need to complete the spreadsheet.

16 April 2018

Marianne was away from the office today, so we didn't have our meeting just yet. We continued to work on the complementary currency spreadsheet. I'm learning that many of these systems are based on time bartering; I'm sure that there a lot of similar systems that have no website around the world, so actually *finishing* the spreadsheet is, in a way, impossible. However, it's interesting to see the different types of economic exchanges that occur around the world.

17 April 2018

Today's been a beautiful, sunny day, so our spirits have been up! We came in and got set up in our office before having a meeting with Marianne in the main office. In this meeting, we went over the work we've accomplished already, the challenges we've faced, and what we still need to do. We were also given additional documents to translate from French into English. We discussed the possibility of working on Monnaie Léman's social media accounts (Facebook and LinkedIn) and plan to work on that tomorrow morning. After the meeting, I began translating one of the documents we were given today.

18 April 2018

Today is Wednesday, so we're working only in the morning. I've spent the whole time translating one of the documents that Marianne gave us (the "Guide d'Information"). I'm about 7 pages in, and will finish translating it tomorrow. Though translating sounded straightforward to

me at first, it's proving to demand some significant problem-solving, as much of what's written in French cannot be directly translated. It's forcing me to really understand what's written and conceptualize a new way to communicate it, without changing the meaning at all. It's a challenge, but I'm happy my brain is having to work a little! Tomorrow we will work from home.

19 April 2018

Today we worked from home. I spent some time working on translating the documents, which continues to pose some unique challenges. I'm noticing that there are times when it is necessary to communicate ideas in different ways than they are originally written. Working on this project is interesting because it's teaching me a lot about Monnaie Léman's outreach strategies and general operations. It's also helping with my more formal French language skills, which I haven't practiced in a long time.

23 April 2018

Today I continued working on translating documents. I also began looking into the websites that Marianne showed us to read articles on complementary currencies from around the world. I emailed Antonin about meeting to have an interview, but he has not responded. Marianne let us know she would try to set up a visit to some Léman-accepting businesses in the area.

24 April 2018

I finished the translation work and tried to go back through to make sure it all makes sense. I continued working on the complementary currency spreadsheet, and reading articles from the website. I also began doing some of my own outside research and reading on LETS (SEL) / mutual credit for my project.

25 April 2018

Today is Wednesday, so we're only here for the morning. I spent some more time researching complementary currencies and aspects of Local Exchange Trading Systems. I'm planning on writing my paper on the different impacts that these systems and complementary currencies can have. It's a very interesting topic. I still haven't heard back from Antonin, and I'm not sure if we'll get the chance to go out and see the businesses that accept Lémans. I'm getting a little worried about finding people to interview for this project. Tomorrow we're planning on going around Geneva to talk to businesses that accept the Léman.

26 April 2018

Today we worked from home. As the commute to Geneva is very long for me, I decided to look into whether there were any businesses that accepted the Léman in Lausanne. It turns out that there are many businesses that do! I decided to contact a business called "La Brouette," an organic and waste-free grocery store nearby. Unfortunately, the person working at the time was not the owner and did not know very much about the business's involvement with Monnaie

Léman. I spent much of the day working on the translation of the other documents we were given.

30 April 2018

Today we finally finished translating the documents into English. It took a lot longer than we expected, but we hustled and got it done. After, we had a meeting with Marianne and Jean about the plan for our final week. We contacted the owner of a nearby restaurant that accepts the Léman to see if we could come in to talk with her about her experience for our papers. We are going on Wednesday at 11am. We were told that Antonin would most likely be available to talk with us this week. I continued conducting research and working on my paper today as well. Tomorrow we won't come into work due to a holiday, but I intend to work on my paper at home.

02 May 2018

Today we got to interview the owner of a nearby restaurant, Anne. It was a very successful conversation; we learned a lot about Monnaie Léman's impact on the local community, from the perspective of a business. She's clearly a very big fan of their's! Tomorrow we will interview Antonin, have a meeting with Jean, and we will be finished with the internship. Monnaie Léman Internship Journal

03 April 2018

Today was the first day of our internship at Monnaie Léman. Seeing as it's the week following Easter, our schedule has been slightly modified, and so we're beginning on a Tuesday. Our mentor and coordinator, Marianne Schirato, welcomed us this morning and showed us around the office. She has assigned us two main projects: the first is to continue contributing to a spreadsheet that will eventually contain information on every currency in the world; the second

is to translate documents from French to English for the purpose of facilitating communication between Monnaie Léman and potential collaborators in the UK and Germany. Today I began working on this second project. The documents which I've been translating designate the steps to integrating the Léman and the LEMANEX (mutual credit / digital currency) for the purpose of information and promotion. Tomorrow, we will come in to the office in the morning, where I'll continue translating documents and, most likely, receive more projects from Marianne.

04 April 2018

As today is a Wednesday, and we have class in Nyon in the afternoon, we're only here at Monnaie Léman for the morning. Today, we spent some time talking with Marianne about the local area in general, which was interesting. After, I continued the project of translating documents from French to English. This has been more challenging than I anticipated, as I'm not used to some of the formal language that is used in French; however, with the help of translation sites, I've been able to accurately translate everything I've needed to. I plan to continue translating documents tomorrow from home, as well as to begin contributing to the list of currencies.

05 April 2018

Today I worked from home, as no one was in the office. As planned, I spent my time translating the document that I had started at the beginning of the week. I was able to finish this task with the help of Zoë. Me and the other interns discussed the work that still needed to be done on the Excel spreadsheet, and decided that we would work on it together. Working at home

was nice because I was able to start working around the same time of day as I normally would (around 9:30 am) without the 1.5 hour commute each way.

09 April 2018

This morning we came into the office and set ourselves up in our office. Marianne touched base with us, and we let her know that we finished the translation task and moved on to the spreadsheet. We met the rest of the office during their meeting, and set up a meeting with Jean to discuss the work we'll be doing here from now on. He also let us know that he would be providing us with our own key to the office. During my downtime, I began looking more into information on mutual credit systems for my final paper. Tomorrow Jean will provide us with instructions for our next tasks.

10 April 2018

This morning we met some more members of Monnaie Léman, who told us they were working on getting the currency represented at a local film festival. After, we continued working on the spreadsheet of the world's complementary currencies, as well as discussed the possibility of making a LinkedIn page for Monnaie Léman.

11 April 2018

As it's a Wednesday, we are only here for the morning. Marianne told us we would have a meeting this morning before leaving, though we have yet to do so. We continued to work on the complementary currency document, and I continued to read the documents that we were given.

12 April 2018

Today we worked from home. I continued working on the complementary currency spreadsheet and was able to add information on more complementary currencies. I'm learning that many of the currencies already on the list are not actually currencies, but time barter systems. One challenge that I've continually faced has been the fact that many of the websites are written in a different language (mostly German). While Google can translate the website, it cannot translate the PDF documents that often contain the information I need to complete the spreadsheet.

16 April 2018

Marianne was away from the office today, so we didn't have our meeting just yet. We continued to work on the complementary currency spreadsheet. I'm learning that many of these systems are based on time bartering; I'm sure that there a lot of similar systems that have no website around the world, so actually *finishing* the spreadsheet is, in a way, impossible.

However, it's interesting to see the different types of economic exchanges that occur around the world.

17 April 2018

Today's been a beautiful, sunny day, so our spirits have been up! We came in and got set up in our office before having a meeting with Marianne in the main office. In this meeting, we went over the work we've accomplished already, the challenges we've faced, and what we still need to do. We were also given additional documents to translate from French into English. We discussed the possibility of working on Monnaie Léman's social media accounts (Facebook and LinkedIn) and plan to work on that tomorrow morning. After the meeting, I began translating one of the documents we were given today.

18 April 2018

Today is Wednesday, so we're working only in the morning. I've spent the whole time translating one of the documents that Marianne gave us (the "Guide d'Information"). I'm about 7 pages in, and will finish translating it tomorrow. Though translating sounded straightforward to me at first, it's proving to demand some significant problem-solving, as much of what's written in French cannot be directly translated. It's forcing me to really understand what's written and conceptualize a new way to communicate it, without changing the meaning at all. It's a challenge, but I'm happy my brain is having to work a little! Tomorrow we will work from home.

19 April 2018

Today we worked from home. I spent some time working on translating the documents, which continues to pose some unique challenges. I'm noticing that there are times when it is necessary to communicate ideas in different ways than they are originally written. Working on this project is interesting because it's teaching me a lot about Monnaie Léman's outreach strategies and general operations. It's also helping with my more formal French language skills, which I haven't practiced in a long time.

23 April 2018

Today I continued working on translating documents. I also began looking into the websites that Marianne showed us to read articles on complementary currencies from around the world. I emailed Antonin about meeting to have an interview, but he has not responded. Marianne let us know she would try to set up a visit to some Léman-accepting businesses in the area.

24 April 2018

I finished the translation work and tried to go back through to make sure it all makes sense. I continued working on the complementary currency spreadsheet, and reading articles from the website. I also began doing some of my own outside research and reading on LETS (SEL) / mutual credit for my project.

25 April 2018

Today is Wednesday, so we're only here for the morning. I spent some more time researching complementary currencies and aspects of Local Exchange Trading Systems. I'm planning on writing my paper on the different impacts that these systems and complementary currencies can have. It's a very interesting topic. I still haven't heard back from Antonin, and I'm not sure if we'll get the chance to go out and see the businesses that accept Lémans. I'm getting a little worried about finding people to interview for this project. Tomorrow we're planning on going around Geneva to talk to businesses that accept the Léman.

26 April 2018

Today we worked from home. As the commute to Geneva is very long for me, I decided to look into whether there were any businesses that accepted the Léman in Lausanne. It turns out that there are many businesses that do! I decided to contact a business called "La Brouette," an organic and waste-free grocery store nearby. Unfortunately, the person working at the time was not the owner and did not know very much about the business's involvement with Monnaie Léman. I spent much of the day working on the translation of the other documents we were given.

30 April 2018

Today we finally finished translating the documents into English. It took a lot longer than we expected, but we hustled and got it done. After, we had a meeting with Marianne and Jean about the plan for our final week. We contacted the owner of a nearby restaurant that accepts the

Léman to see if we could come in to talk with her about her experience for our papers. We are going on Wednesday at 11am. We were told that Antonin would most likely be available to talk with us this week. I continued conducting research and working on my paper today as well.

Tomorrow we won't come into work due to a holiday, but I intend to work on my paper at home.

02 May 2018

Today we got to interview the owner of a nearby restaurant, Anne. It was a very successful conversation; we learned a lot about Monnaie Léman's impact on the local community, from the perspective of a business. She's clearly a very big fan of their's! Tomorrow we will interview Antonin, have a meeting with Jean, and we will be finished with the internship.