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Outreach & Sustainability of Microfinance Institutes (MFIs) in the Midst of the Anglophone Crisis in Cameroon: A Comparative Analysis of MFIs Affiliated to CamCCUL Using DEA and Tobit Censored Model for the Period of 2017 and 2020

Parveen Ngum Neba

Department of Money and Banking, School of Higher Institute of Commerce and Management, University of Bamenda, Bamenda, Cameroon
Email: Panniverlord@yahoo.ca

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Abstract

Microfinance and its origin are associated with poverty reduction. Despite increased regulation on Microfinance Institutions, challenges in terms of financial sustainability and social responsibility (Outreach) still persist. The main goal of this paper is to assess the effect of Anglophone crisis on the Outreach and Sustainability of Microfinance Institutes in Cameroon. The Data Envelopment Analysis (DEA) method and the Tobit Censored model were used on data of 40 MFIs affiliated to CamCCUL selected from the Northwest and Southwest Regions of Cameroon given that these are the two regions that have been highly affected by the Anglophone crisis for the period of 2017 and 2020. Findings reveal that there is trade-off between Outreach and Sustainability of MFIs. The Anglophone crisis has greatly affected the efficiency of MFIs located in the Northwest and Southwest regions of Cameroon. However, analysis showed that there was a slight improvement in outreach and financial performance of MFIs in 2020 as compared to the year 2017 when the crisis was at its peak. It was also realised that the size of MFI, its location, subsidies and other related factors have a great influence on their efficiency. The paper, therefore, recommends that the Government should highly subsidise MFIs in the Northwest and Southwest Regions to enable them to survive in the midst of the Anglophone Crisis and MFIs should adopt good governance practices in order to be efficient both in terms of Social Performance (Outreach) and Financial Performance (Sustainability) in this midst of this

crisis.

Keywords

Microfinance, Outreach, Sustainability, Social Performance, Financial Performance, Anglophone Crisis, DEA, Tobit Censored

1. Introduction

Most people find themselves in a dilemma when asking the question if Microfinance Institutions (MFIs) are sustainable and at the same time meeting their social objectives. This question is ironic but nevertheless relevant if MFIs keep to their "promise" of being an important tool of poverty alleviation and development.

Despite the fact that Microfinance has proved its worth as a tool to alleviate poverty, especially in the context of Cameroon however the Anglophone crisis has drastically had an impact on the extent to which MFIs play their role in poverty alleviation (outreach) in the Northwest and Southwest (NOSO) Regions of Cameroon. Most MFIs in the midst of the Anglophone crisis are struggling to be sustainable because the frequent lockdowns, ghost town, workers not coming to work regularly due to gunshots and poor managerial strategies adopted during this crisis seem to be affecting their outreach and financial performance drastically. MFIs in the NOSO are going through a critical phase especially with the governance practices within these organisations (Labie, 2001) mostly affected by the Anglophone crisis. Most Microfinance Institutions (MFIs) face the challenge of achieving sustainability, but are also faced with the problem of governance (Mersland & Øystein Strøm, 2009). For most MFIs to survive in this Anglophone crisis, Mersland and Øystein Strøm (2009) argue that, in order to improve their performance and make Microfinance a much more effective weapon against poverty and hunger, it is important they adopt good governance practices in the midst of the Anglophone crisis.

Good governance of MFIs requires a clear strategic vision of the organisation, transparency and efficient management strategy acceptable by all involved with the organisation (Lapenu & Pierret, 2006). According to Lapenu and Pierret (2006), the governance within MFIs has situated at the crossroads of two approaches: a political/ethical approach and an economic/managerial approach. They argue that the political/ethical approach emphasises the need for MFIs to have in place a strategic vision for the institution, the legitimacy of its decision-makers and the integration of the institution into its environment. On the other hand, the economic/managerial approach emphasises MFIs having in place a system of good governance that can improve the organisation's efficiency, reduce most of the costs incurred in the running of the organisation and optimise

resources. At the same time, Kyereboah-Coleman and Osei (2008) and Bakker et al. (2014) argue that, as MFIs increase in their numbers and outreach, increase their assets and the savings of the poor, not only are they supposed to submit to some form of regulatory regime, but should be forced to assume good governance practices (Labie, 2001). Therefore, in order to differentiate between governance within other industries and MFIs, the Council of Microfinance Equity Funds (CMEF) in 2005 published the governance guidelines for The Practice of Corporate Governance in Shareholder-Owned Microfinance Institutions (Council of Microfinance Equity Funds, 2012).

Despite the growing importance of MFIs as a tool to alleviate poverty and hunger, not many studies have looked at the effect of the Anglophone crises on MFIs' outreach and sustainability in Cameroon. Only studies by Kyereboah-Coleman and Biekpe (2005), Hartarska (2005), Kyereboah-Coleman and Osei (2008), Bassem (2009), and Mersland and Øystein Strøm (2009) have looked at the impact of governance on MFIs, their impact on outreach and sustainability. But unfortunately, none has looked at the Anglophone crisis, and their effect on outreach and sustainability of MFIs in the two Anglophone Regions in Cameroon.

Therefore, in this paper, we are using the case of 40 *MFIs affiliated to CamCCUL located in the Northwest and Southwest Regions of Cameroon to answer the question* "*What are the effects of the Anglophone crisis on sustainability and Outreach of MFIs in Cameroon*?"

This paper will be organized as follows: 1) Introduction, 2) Literature Review, 3) Research Method and Methodology, 4) Data Analysis and Discussion of Findings, and 5) Conclusion and Policy Implications

2. Literature Review

2.1. Evolution of the Anglophone Crisis

The Anglophone area consists of two of the country's ten regions, the Northwest and the Southwest. It covers 16,364 sq km of the country's total area of 475,442 sq km and has about 5 million of Cameroon's 24 million inhabitants. It is the stronghold of the main opposition party, the Social Democratic Front (SDF) and plays an important role in the economy, especially in its dynamic agricultural and commercial sectors. Most of Cameroon's oil, which accounts for one-twelfth of the country's gross domestic product (GDP), is located off the coast of the Anglophone region.

The Anglophones of Cameroon, 20 percent of the population, feel marginalised. Their frustrations surfaced dramatically at the end of 2016 when a series of sectoral grievances morphed into political demands, leading to strikes and riots. The movement grew to the point where the government's repressive approach was no longer sufficient to calm the situation, forcing it to negotiate with Anglophone trade unions and make some concessions. Cameroon's Anglophone regions have been stuck in a civil war involving the government and separatist

groups. The Anglophone Crisis has a devastating effect on poverty in the region. Additionally, the crisis ruined livelihoods and caused several civilian casualties.

Historically, the British and the French governed Cameroon. However, in 1972, French Cameroon assumed executive control over the entire region, including the British sector. As a result, the Anglophone Cameroonians found themselves slowly shrinking in power. A protest by the Anglophone Cameroonians in 2016 resulted in a lethal response from the Francophone government. Subsequently, it set off the Anglophone Crisis. A group of Anglophone separatists declared independence in a region called Ambazonia.

At least 4000 civilians died as a result of the Anglophone Crisis, and the crisis displaced far more. Throughout the region, citizens have witnessed the burning of buildings, the kidnapping of their neighbors and the destruction of homes. Those who survive escape to live in the jungle or seek refuge in neighboring countries, often living on little to no food, water and money.

Originally, the cycle of conflict was repetitive: a radical separatist would incite an attack on the Francophone military, and the military would respond by going after the separatists in frenzy. However, several recent Anglophone attacks shifted to target civilians. Francophone government security forces are also consistently unafraid to abuse any civilians suspected of having separatist connections.

There are human rights abuses coming from both sides of the Anglophone Crisis. However, providing aid to the region is extremely difficult. The Francophone government has a complex and tough procedure that organizations must go through in order to receive approval. Additionally, these organizations also have to negotiate with separatist groups. However, both sides are kidnapping aid workers due to suspected collusion.

As more and more people experience displacement, it is increasingly more difficult for these civilians to find assistance. In particular, the healthcare system in Cameroon is in shambles. During the COVID-19 pandemic, this becomes especially dangerous. The United Nations has reported that nearly 20% of healthcare facilities are no longer functioning. The organization Doctors Without Borders was running a free ambulance system that has completed thousands of referrals. However, the organization suspended the program in the Ambazonia region in December 2020.

A movement of grassroots peace activists, largely women, attempts to end the Anglophone Crisis following the breakdown of official talks between the two sides. They do not have the prowess or protection that the international mediators have. However, they do have the benefit of being local. They understand the conflict in a way that outside groups do not, and they work on multiple facets of peace. Groups worked to soften a school boycott that disrupted children's education for years. Also, they helped former fighters of the conflict re-integrate back into society.

Peacemaking is still dangerous, and many people on either side do not want it

to happen. These activists are subject to arrest, abduction and torture from both the Anglophones and Francophones. Despite the risks, their work is incredibly important. With their goals of social cohesion and healing, these peace activists bring hope to a dark period of time.

All these and many more have led to the closure of many businesses in the Anglophone regions. Many civilians who have now become homeless are trying to start up a petite business but inadequate capital is what is stopping them and the question now is do MFIs institutions reach out to these individuals to give them these Petite credits as their social objective demand of them or are they are struggling to survive in terms of sustainability in the midst of the Anglophone crises?

2.2. Outreach and Sustainability of MFIs

2.2.1. Outreach

MFIs make efforts in order to serve those who are constantly excluded from official financial systems: Their operation rests on the social bonds and the proximity with the recipients while moving into the rural zones, by contacting them and in their offering training sessions. They are based on group work and meet the needs of the populations by supplying small amount loans and regular refunding. The goal, which aims at extending microfinance services to the populations that are not served by official financial institutions, defines outreach (Lafourcade et al., 2005). However, MFIs must determine which group-target they must satisfy. Poverty, by its multidimensional nature, covers various aspects of the households? Economic and social status. To capture these dimensions requires at the same time quantitative and qualitative indicators. Poverty is quantitatively defined as being a given daily (or yearly) income, for people without provision of a stock. It is also qualitative as it takes into account their living conditions (Lelart, 2006). It can integrate data such as the needs for food and clothing, housing availability, level of educational, health care, women empowerment, level of integration within the social background, etc. In this respect, extending accessibility to financial services for these poor seems the major goal of MFIs: Thus it raises the question if they do manage to reach the poorest.

Outreach at a glance means the number of clients served. But, Meyer et al. (2002) noted that outreach, is multidimensional concept. In order to measure outreach, we need to look in to different dimensions. The first is simply the number of persons now served that were previously denied access to formal financial services. Usually, these persons will be the poor because they cannot provide the collateral required for accessing formal loans, are perceived as being too risky to serve, and impose high transaction costs on financial institutions because of the small size of their financial activities and transactions.

Women often face greater problems than men in accessing financial services. So the number of women served is often measured as another criterion. Although difficult to measure, depth of poverty is a concern because the poorest of

the poor face the greatest access problem. Some measure of depth of outreach is needed to evaluate how well MFIs reach the very poor. Finally, the variety of financial services provided is the criterion because it has been shown that the poor demand and their welfare will be improved if efficient and secure savings, insurance, remittance transfer and other services are provided in addition to the loans that are the predominant concern of policymakers.

2.2.2. Sustainability of MFIs

Unlike formal sector financial institutions, the large majority of MFIs are not "sustainable," where sustainability is equated in microfinance literature and parlance with financial self-sufficiency. Instead, most MFIs are able to operate without covering their costs due to subsidies and gifts from governments and other donors. Notwithstanding, the microfinance industry is dominated by an institutionist paradigm (Woller & Woodworth, 2001) asserting that a MFI should be able to cover its operating and financing costs with program revenues. The conceptual foundations of the institutionalists paradigm stem to a large degree from the work of researchers at the Ohio State University's Rural Finance Program. Their analysis of the failed rural credit agencies established by several LDC governments during the 1960s and 1970s diagnosed the primary cause of failure to be the "lack of institutional viability" (Gonzales, 2010). This diagnoses led logically to two principal conclusions: 1) institutional sustainability was key to successful provision of financial services to the poor and 2) financial self-sufficiency was a necessary condition for institutional sustainability. The institutionalists argument is consistent with Hollis and Sweetman (1998) who discuss six historical cases in an attempt to identify the institutional designs that facilitated success and sustainability for 19th century loan funds in the UK, Germany, and Italy. The authors conclude that subsidized loan funds were more fragile and lost focus more quickly than those that obtained funds from depositors.

In contrast, Welfarists take odds with institutionalists over the issue of sustainability. Welfarists argue that MFIs can achieve sustainability without achieving financial self-sufficiency (Woller & Woodworth, 2001). They argue that donations serve as a form of equity and as such, the donors can be viewed as social investors. Unlike private investors who purchase equity in a publicly-traded firm, social investors do not expect to earn monetary returns. Instead, these donor-investors realize a social, or intrinsic, return. Social investors can be compared to equity investors who invest in socially responsible funds, even if the expected risk-adjusted return of the socially responsible fund is below that of an index fund. These socially responsible fund investors are willing to accept a lower expected financial return because they also receive the intrinsic return of not investing in firms that they find offensive. Microfinance social investors take this notion to the limit, generally earning zero financial returns and relying totally upon intrinsic returns.

Morduch (2000) refers to the debate between institutionalists and Welfarists

as the "microfinance schism". Driving the schism are competing perceptions of the implications for financial self-sufficiency on depth of outreach. General consensus holds that there exists a trade-off between financial self-sufficiency and depth of outreach. But masked by this consensus is much disagreement about the nature, extent, and implications of this trade-off. Nonetheless, what little evidence exists suggests that those MFIs that have achieved true financial self-sufficiency have also tended to loan to borrowers who were either slightly above or slightly below the poverty line in their respective countries (Navajas et al., 2000).

These MFIs are able to capture economies of scale by extending larger loans to the marginally poor or non-poor. Although still an open question, this limited evidence leads many to conclude that if financial self-sufficiency is desired, then the very poor will not be reached by MFI services. That is, the MFI will not be able to achieve enough depth to reach those who need credit the most desperately.

Different literatures noted that financial sustainability is one of the areas that we need to look at to assess the performance of microfinance institutions. **Sustainability** is defined as having an operational sustainability level of 110 percentage or more, while Operational sustainability is defined as having an operational self-sufficiency level of 100 percentage or more. The operational self-sufficiency measure is defined as: total financial revenue /financial expense +operating expense. Meyer et al. (2002) noted that the poor needed to have access to financial service on long-term basis rather than just a onetime financial support. Short term loan would worsen the welfare of the poor (Navajas et al., 2000).

Meyer et al. (2002) also stated that the financial unsustainability in the MFI arises due to low repayment rate or un-materialization of funds promised by donors or governments.

According to Meyer et al. (2002), there are two kinds of sustainability that we could observe in assessing MFIs performance: **Operational self-sustainability and Financial self-sustainability**.

Operational self-sustainability is when the operating income is sufficient enough to cover operational costs like salaries, supplies, loan losses, and other administrative costs. And financial self-sustainability (which he referred as high standard measure) is when MFIs can also cover the costs of funds and other forms of subsidies received when they are valued at market prices.

Many studies have been carried out to measure the efficiency of MFIs in Cameroon but many have not captured both Outreach and Sustainability in measuring the efficiency of these MFIs rather they just concentrate on the financial performance of these MFIs. In addition, no study has really investigated the impact of the Anglophone crisis on the outreach and sustainability of MFIs especially those located in the Northwest and Southwest Regions of Cameroon. Based on this justification, the researcher saw the need to carry out research on this topic and bring out recommendation on how MFIs institutions can improve

their performance in the midst of the Anglophone Crisis.

3. Research Method and Methodology

3.1. Scope and Area of Study

This study used cross-sectional data of the CamCCUL network for the years 2017 and 2020. Data were collected from secondary sources (balance sheet, trial balance, income and expenses statement, prudential ratios status document as prepared and validated by the Board of Directors of CamCCUL). The choice of the Cameroon Cooperative Credit Union League (CamCCUL) was motivated by the fact that this network is a major actor of the microfinance sector in a Cameroonian financial sector dominated by traditional banks.

3.2. Methods of Data Analysis

3.2.1. The Data Envelopment Analysis Model

The present paper used a non parametric approach to estimate the score of efficiency of 40 MFIs affiliated to CamCCUL. This was done taking into consideration the dual role of these institutions which is reaching the poor (outreach) while remaining financially sustainable. DEA essentially calculates the economic efficiency of a given organization relative to the performance of other organizations producing the same good or service, rather than against an idealized standard of performance. It assumes the existence of a convex production frontier. This frontier in the DEA approach is constructed using linear programming method. The term envelopment comes from the fact that the production frontier envelops the set of observations and any point below the frontier is considered as technically inefficient. This non parametric approach offers two main advantages as compare to parametric approaches.

DEA allows the calculation of technical efficiency measures of Decision Making Unit (DMU) that can be input or output oriented. It is the input oriented approach that has been used in this paper. The two measures provide the same results under constant returns to scale (CRS) but give different values under variable returns to scale (VRS). The DEA model is a mathematical model that gives the relation between inputs and outputs of a DMU. Though many studies adopted the production approach, this study used an intermediation-outreach approach of efficiency measurement quite similar to that of Fall (2018).

Our input oriented DEA model consists of three (5) inputs and four (7) outputs as shown in **Table 1**.

3.2.2. The Censored Tobit Model

After assessing these levels of efficiency, we have used a censored Tobit model in order to identify factors affecting these levels of performance. Here we have used the level of efficiency estimated with the DEA as the dependent variable. Regulation ratios and other control factors are used as independent variables. Explicitly, we have estimated the following equation:

Table 1. Choice of variables for the DEA Approach.

Inputs	Outputs
❖ Capital	❖ Loans
❖ Assets	❖ Savings
❖ Personnel costs	❖ Operating Income
❖ Operating costs	❖ Other Income
❖ Other charges	❖ Breadth: Number of clients
	❖ Depth: Number of poor
	❖ Depth: Number of women

Source: Author.

$$\text{PERF} = f\left(\text{EFC, FACR, RISK, LIQUIDITY, RURAL, DIR, SIZE, SUB}\right) \quad (1)$$

The functional form of our Tobit model can be written as follows:

$$\begin{aligned}\text{PERF} = {} & \alpha_0 + \alpha_1\text{EFC} + \alpha_2\text{FACR} + \alpha_3\text{RISK} + \alpha_4\text{LIQUIDITY} \\ & + \alpha_5\text{RURAL} + \alpha_6\text{DIR} + \alpha_7\text{SIZE} + \alpha_8\text{SUB} + \varepsilon\end{aligned} \quad (2)$$

where: **PERF** is the vector of technical inefficiency coefficients under the assumption of variable return to scale (VRSTE) determined in the DEA model. Since our level of efficiency ranges from]0; 1], the censored Tobit model cannot be operational. In order to overcome this difficulty, we used the level of inefficiency measured by 1-efficiency. This level of inefficiency varies from [0; 1[rendering the tobit model operational. Consequently, a positive effect of any explanatory variable on the level of inefficiency will translate into a negative effect on the level of efficiency (performance).

- **Financial regulation variables**

EFC = external funding coefficient measured the capital to debt ratio. It is known in the WAEMU zone as the debt to equity ratio. However, in the CEMAC zone, this ratio is defined in the COBAC standard as the ratio of equity over debts. Therefore, the higher the ratio, the lower the level of risk taken by MFI. Consequently, we expect a negative sign of the parameter.

FACR = fixed assets coverage ratio: the more this ratio increases, the more the MFI finances its fixed assets through its capital. So we expect a negative sign of the parameter.

RISK = risk coverage ratio measured by the ratio of adjusted capital and reserves to the sum total of loans to members and financial assets: the higher the risk coverage ratio, the lesser the MFI exposition to risk and the better they can face eventual losses.

LIQUIDITY = liquidity ratio; in conformity with the COBAC standard, MFIs are bound to respect a minimum ratio of 100% between current financial availabilities (funds) and long term financial liabilities. The higher the ratio, the more liquid are the MFIs and the more they ration loans. We therefore expect a positive sign of the parameter.

- **Control Variables**

SIZE = size of the MFI measured by the natural logarithm of total assets. Large size MFI might benefit from economy of scale in the distribution of financial services. However, a large size of the MFI can also lead to poor management and to an abandonment of the social mission of the MFIs. So the sign of the parameter is ambiguous.

SUB = subsidies measured by the volume of subvention received by the MFI. It is not trivial to mention here that some credit unions included in our study still receive subsidies. Subsidies give these MFIs the possibility to reach the maximum number of poor by distributing more loans without too much consideration in terms of profitability. In a nutshell, subventions can translate into lower lending interest rate and more loans to the poorer. Nevertheless, more subventions can translate into laxity in the granting of loans. Therefore, our expected sign is ambiguous. DIR = deposit interest rate remunerates savings and deposits and constitutes a charge to the credit unions. The higher this interest rate the higher the financial charges of MFIs. Therefore, we expect a positive relationship between DIR and MFIs inefficiency.

RURAL = dummy variable rural area (that is 1 if the MFI is situated in a rural area and 0 if the MFI is located in the urban area). Even though MFIs operates in both rural and urban areas, we believe that the target population of Microfinance is mostly those living in rural areas where formal banking services are absent and where there is abject poverty. We, therefore, expect the location in rural area to have a negative effect on MFIs inefficiency. α_0 is the constant term and $\alpha_1 + \alpha_2 + \alpha_3 + \alpha_4 + \alpha_5 + \alpha_6 + \alpha_7 + \alpha_8$ are the coefficients of EFC, FACR, RISK, LIQUIDITY, RURAL, DIR, SIZE and SUB respectively. The Tobit model is estimated by maximizing the log-likelihood of the model.

4. Data Analysis and Discussion

4.1. Summary of Descriptive Data

Prior to the Data Envelopment Analysis and the Tobit estimation, a descriptive analysis of all the variables used for the analysis is conducted. Table 2 present the summary of descriptive statistics of CamCCUL data for 2017.

Results from Table 2 above indicate that the average capital of the 40 MFIs affiliated to CamCCUL selected for the study stands at 250 million with a standard deviation of 411 million indicating very high variability of MFIs size measured by capital with capital values ranging from 720,326 to 2.40 billion francs.

In terms of labour captured by payroll expenses, the average value for the CamCCUL MFIs selected is estimated at 46.1 million while the standard deviation stands at 64.9 million which is far higher than the mean and which shows that there is high disparity of size of MFIs measured by the number of employees. Labour varies between 80,000 and 394 million.

The mean value of other expenses excluding financial expenses is 65.8 million with a standard deviation of 93.3 million revealing that there is wide dispersion of values around the mean with these values evolving from 95,160 to 667 million.

Table 2. Summary of descriptive statistics for CamCCUL 2017.

Variable	Obs	Mean	Std. Dev.	Min	Max
capital	40	2.50e+08	4.11e+08	720326	2.40e+09
labour	40	4.61e+07	6.49e+07	80000	3.94e+08
otherexp	40	6.58e+07	9.33e+07	95160	6.67e+08
savings	40	2.27e+09	2.43e+09	6276785	8.52e+09
loan	40	2.28e+09	2.79e+09	4194640	9.99e+09
otherinc	40	3.31e+08	4.01e+08	363990	1.95e+09
nab	40	5064.175	5281.97	476	65047
pwb	40	0.43055	0.2336923	0.003	1
alb	40	365045.3	760624.1	47.96944	4574956
assets	40	3.15e+09	4.33e+09	2.18e+07	3.05e+10
car	40	0.221055	0.1638601	0.0292	0.4437
risk	40	0.257365	0.1798098	−0.0303	0.5707
liquidity	40	13.88836	49.31846	0.3727	320.6221
facr	40	4.944507	8.587734	−0.8603	48.4445
efc	40	3.88396	3.47511	0.475	9.8045
sub	40	0.4	0.5640955	0	1

Source: Computed by the author.

The average savings of CamCCUL is 2.27 billion while the mean value of loan stands at 2.28 billion indicating very high coefficient of transformation in the network (more than 100%). The average value of other income than financial income (bank operating income and other income) is 331 million with a standard deviation of 401 million which reveals that there is wide dispersion around the mean. The minimum of other income is 363,990 while the maximum is 1.95 billion.

On average the 40 MFIs count 5064 members with an average percentage of women members of 43.055%. The huge disparity among the MFIs is also expressed in terms of number of members and percentage of female members as values of number of active members fluctuate between 476 and 65,047. While some MFIs had as low as 0.3% female members, others had all their members who are female making a maximum value of female members (percentage of women borrowers as named by scholars) of 100%. The average loan per borrower's mean value stands at 365045.3 with a standard deviation of 760624.1 which, once again depicts very high variability in the sample with values ranging from 47.97 to 4,574,956.

The average value of total assets for the sample for the year 2017 stands at 3.15 billion with huge disparity as indicated by the standard deviation of 4.33 billion. Values of total assets range between 21.8 million and 30.5 billion.

Performance in terms of regulatory ratios indicates that the average value of capital adequacy ratio (CAR) is 22.11% while that of risk coverage ratio is 25.74%, 1388.84% for liquidity ratio and 494.35% for fixed assets coverage ratio (FACR) and 388.4% for external funding coefficient (EFC as a proxy for debt to equity).

These tables indicate that the network is averagely over liquid with lot of disparities among the MFIs. Some MFIS exhibit very poor performances in terms of risk coverage ratio and fixed assets coverage ratio with minimum values being negative for both variables.

In terms of subventions, results from descriptive analysis indicate that 40% of the MFIs received subventions in 2017 as against 60% of the MFIs which did not receive.

Table 3 above provides a descriptive analysis of MFIs affiliated to CamCCUL in 2020. Comparatively, it should be noted from Table 3 that there was an increase in the average value of capital of the selected MFIs affiliated to CamCCUL since average capital move from 250 million to 268 million while labour experienced a drop from 46.1 to 45.3 million which may be an indication of contraction in the number of personnel due to the crisis or more efficient management of payroll.

Similarly, other expenses excluding financial expenses also experience a fall between 2017 and 2020 moving from 65.8 million to 65.1 million on average. On the contrary, there has been an increase in the mean value of savings and loans by about 0.6 billion and 0.28 billion respectively, this can be explained in the sense that when the crisis was at its peak in 2017, people fled away and very few people were there to save whereas as compared to 2020, majority of the population has returned home and has boosted the rate of savings. However, the transformation coefficient (loan/savings ratio) has dropped as the volume of loans in 2017 is lower than that of savings. Other income also drops from 331 million in 2017 to 312 million in 2020.

There is an increase in the average number of members with the values calculated at 6793 in 2020 as against 5064 in 2017 while the percentage of women borrowers (percentage of female members) reduces from 43.06% in 2016 to 42.2% in 2020 with increase in the minimum value to 28% (as compared to 0.3% in 2017) and a fall in the maximum value to 54% (as opposed to 100% in 2017).

The average loan per borrower also experienced a drop.

4.2. Results of Correlation Analysis

As a prelude to the data analysis proper, the study also carried out a correlation analysis in order to detect possible problem of multicollinearity. However, it should be noted that the multicollinearity problem concerns more of the Tobit model variables given that problem of multicollinearity is not much of a concern in the DEA analysis.

Table 4 presents the correlation analysis for CamCCUL data for the year 2017

Table 3. Summary of descriptive statistics for CamCCUL 2020.

Variable	Obs	Mean	Std. Dev.	Min	Max
capital	40	2.68e+08	4.04e+08	515973	2.51e+09
labour	40	4.53e+07	5.45e+07	842000	3.29e+08
otherexp	40	6.51e+07	7.89e+07	2012775	4.64e+08
savings	40	2.87e+09	4.48e+09	1.87e+07	2.50e+10
loan	40	3.56e+09	4.51e+09	2248400	1.61e+10
otherinc	40	3.12e+08	3.75e+08	385815	1.73e+09
nab	40	6793.475	8149.288	740	48188
pwb	40	0.422	0.0992777	0.28	0.54
alb	40	157462.5	574627	48.3282	3112575
assets	40	3.38e+09	4.99e+09	2.86e+07	2.60e+10
car	40	0.524025	2.012099	−0.0519	15.45
risk	40	0.2193675	0.3156294	−0.9998	0.8956
liquidity	40	4.252262	4.833477	0	13.1717
facr	40	5.37164	8.385266	−2.9668	35.8396
efc	40	3.996065	3.770005	−1.8489	10.7545
sub	40	0.425	0.5743416	0	1

Source: Computed by the author.

Table 4. Pairwise correlation matrix for CamCCUL 2017.

	Assets	car	Risk	Liquidity	facr	efc	sub
assets	1.0000						
car	−0.0752	1.0000					
risk	0.0917	0.1719	1.0000				
liquidity	0.0676	−0.1862	−0.0799	1.0000			
facr	0.0554	−0.1894	−0.0353	0.9702	1.0000		
efc	0.2281	0.0728	0.0805	0.1120	0.1330	1.0000	
sub	0.2914	0.0802	0.3829	0.3570	0.3627	0.2168	1.0000

Source: Computed by the author.

Using a benchmark of 0.8, Table 4 reports the pairwise correlation results among the main variables and explores the potentials for multicollinearity. Results from the correlation analysis of the Tobit model regressors reveal that there is no strong correlation among the independent variables which therefore permits us to conclude that multicollinearity was not a major concern in the model.

Just like the previous correlation analysis on Table 4 as seen in Table 5, no correlation coefficient reaches 0.8 which indicates that there exist weak correlations among the variables. As such multicollinearity is not a serious problem in the model.

Table 5. Pairwise correlation matrix for CamCCUL 2020.

	Assets	car	Risk	liquidity	facr	efc	sub
assets	1.0000						
car	−0.0512	1.0000					
risk	0.0770	0.0606	1.0000				
liquidity	0.0029	−0.0857	0.1457	1.0000			
facr	0.0117	−0.0532	0.1682	0.6417	1.0000		
efc	0.2138	−0.0713	0.2850	0.0834	0.1432	1.0000	
sub	0.2070	0.2202	−0.2133	0.2119	0.1493	−0.0990	1.0000

Source: Computed by the author.

4.3. Efficiency Analysis

4.3.1. Analysis of Social Performance (Outreach) and Financial Performance (Sustainability) of 40 MFIs Affiliated to CamCCUL for the Year 2017 (Peak of the Crisis)

The crisis started at the end of 2016 and intensified in 2017. There were numerous lockdowns, burning of houses and business places, financial institutions were closed for days, workers not coming to work because of gunshots, mobilization in terms of saving was low as everyone was fleeing to the francophone regions for safety, economic activities drastically dropped. All of these had a negative impact on the outreach of MFIs Institute in the Northwest and Southwest regions of Cameroon as can be seen in the diagram below Figure 1.

The diagram of social performance of the CamCCUL network for the year 2017 confirms the very poor performance of CamCCUL in terms of social efficiency which is one of the key missions assigned to the microfinance industry. Close observation of the CRS diagram reveals that nearly all the MFIs affiliated to this network are perfectly inefficient as their social efficiency score is close to 0 indicating that their level of inefficiency (1 minus efficiency score) is close to 1. Only 16 MFI was funded on the efficiency frontier in the CRS model as opposed to 18 MFIs which are located on the VRS model frontier. Going by the VRS diagram, it can still be observed that the majority of MFIs are found below 0.2 with a few found above 0.2 but still below 0.6. These results simply illustrate a poor social policy in the CamCCUL network during this Anglophone crisis (Figure 2).

From the scatter diagram above, it can be seen that the majority of MFIs affiliated to CamCCUL had a high score of financial efficiency in 2017 since most of the points in the diagram are concentrated in the interval 0.8 to 1. When we look at the CRS efficiency, it can be noted that 10 MFIs were financial efficiency (a technical efficiency score of 1) and therefore lies on the frontier whereas with the variable return to scale hypothesis, 13 MFIs were efficient and form the frontier. The lowest efficiency score in this network for the year 2017 lies above 0.5 for both models. This implies that during the peak of the crisis, these MFIs neglected their social objectives in terms of outreached and concentrated on their

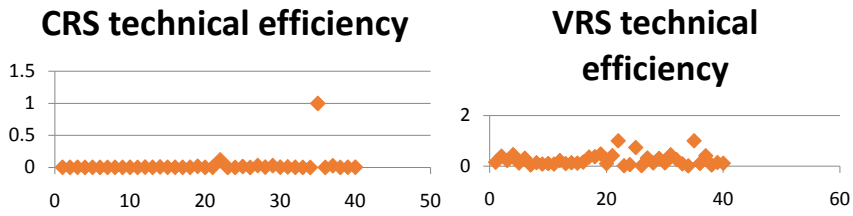

Figure 1. CamCCUL social technical efficiency for 2017. Source: Author.

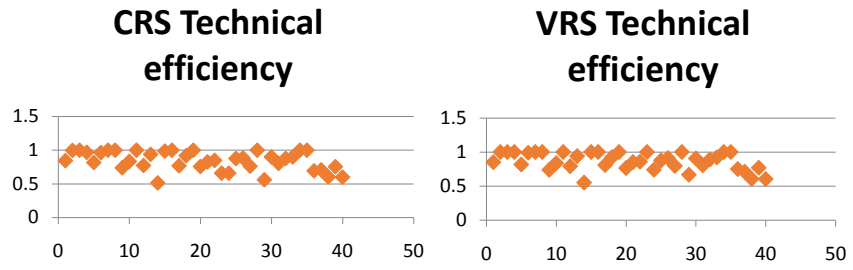

Figure 2. CamCCUL financial technical efficiency for 2017. Source: Author.

sustainability in terms of financial performance. Most of these MFIs were struggling not to die off by doing everything possible to be sustainable during the crisis as seen from the diagram.

4.3.2. Analysis of Social Performance (Outreach) and Financial Performance (Sustainability) of 40 MFIs Affiliated to CamCCUL for the Year 2020

From 2017-2018, the crisis intensified and many more homes and business places were burnt, many Anglophones fled to Francophone regions for safety and for their children to go back to school since schools were stopped in these two Anglophone regions during this period. As time went on, several attempts were put in place to calm the crisis and it came to fruition at the end of 2018. This was observed through reopening of schools in the Anglophone regions though timidly. The condition has improved a lot in terms of economic activities. Anglophones returning back home and burning of houses and businesses places has drastically dropped as observed by the researcher in 2020. All these have paved the way for most MFIs to take on their social objective in terms of outreach. As compared to the year 2017 we realised that an attempt was made during this period as many Anglophones returned home to provide them with Micro credit to encourage them to start a petite business to survive their families as can be seen on the scattered diagram below **Figure 3**.

From the analysis in **Figure 3**, we realise that slight improvement can be observed in the social efficiency of CamCCUL in 2020. Though there is a slight improvement, it should be noted that the overall social efficiency of the network remains alarming. The quasi totality of MFIs is found to have a score far below 0.2. Only 2 MFIs were found on the frontier of the CRS model as against 4 in the VRS model. This shows that MFIs affiliated to CamCCUL are on an overall base performing very poorly in the midst of the Anglophone Crisis.

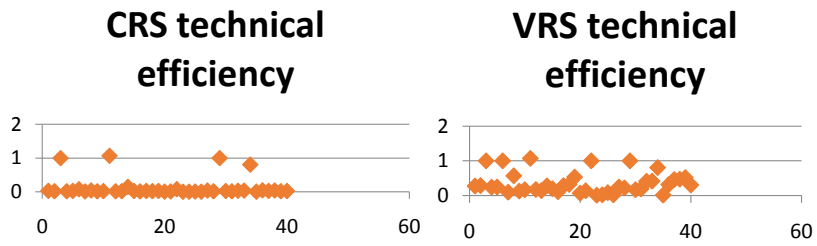

Figure 3. CamCCUL social technical efficiency for 2020. Source: Author.

Close observation of the diagram of financial efficiency of the CamCCUL network for the year 2020 indicates that there is high concentration of score in the range [0.8 - 1]. In fact, the quasi totality of MFIs is found to have a financial efficiency score within that bracket. In terms of financially efficient MFIs (MFIs situated on the frontier that is having an efficiency score of 1), it can be seen that 17 MFIs were financially efficient following the CRS hypothesis as at 22 MFIs for the VRS model. However, it should be noted that this network recorded the lowest financial efficiency score since one of the MFI recorded a score far below 0.2 as seen on the graph (**Figure 4**).

4.4. The Effect of the Anglophone Crisis on the Efficiency of MFI Affiliated to CamCCUL Located in the North and Southwest Regions in Cameroon

The Tobit results of factors affecting MFIs inefficiency the North and Southwest Regions in Cameroon are consolidated in **Table 6** below obtained from the Tobit Regression Results.

The coefficient of size of the MFI is positive as seen in **Table 6** which implies that there is a positive effect of size of the MFI on the financial inefficiency of CamCCUL in 2017. Said otherwise, as the size of the MFI increases, its financial efficiency reduces most especially as management became difficult during the Anglophone crisis due to multiple lockdowns and employees not reporting to work frequently due to gunshots. Further results indicate that the coefficient of size squared is negative which implies that there is negative effect of size squared on the financial inefficiency of CamCCUL. Since the coefficient of size squared is different from that of size, we can conclude that there is a quadratic effect of size of the MFI on their financial performance. In effect, there is a minimum size of the MFI after which the MFI starts enjoying economies of scale. However, it should be noted that both coefficients are statistically insignificant.

The coefficient of capitalisation measured by capital adequacy ratio is negative which means that there is a negative which is not as expected effect of capitalisation on the financial inefficiency of CamCCUL in 2017. In other words, the higher the MFIs capital to assets ratio, the higher will be the MFI financial efficiency. However, this outcome is statistically insignificant. In addition, there is a negative effect of risk coverage ratio on the financial efficiency of CamCCUL in 2017 given that the coefficient of risk coverage is positive (0.674). Once again, no significant relationship could be established with the variable.

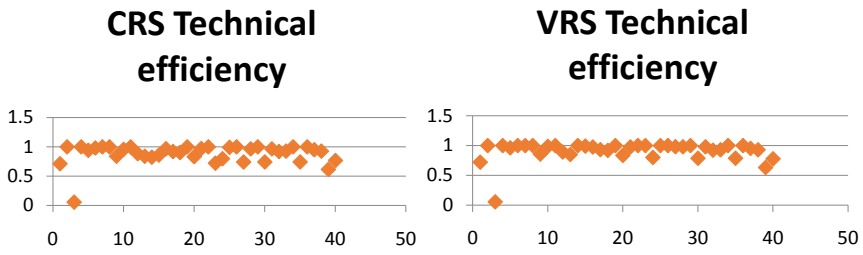

Figure 4. CamCCUL financial technical efficiency for 2020. Source: Author.

Table 6. Determinants of efficiency of CamCCUL 2017.

	(1)	(2)	(3)	(4)
VARIABLES	Financial inefficiency	$p > \|t\|$	Social inefficiency	$p > \|t\|$
size	1.100	0.150	1.902	0.121
	(0.750)		(1.200)	
$size^2$	−0.0281	0.132	−0.0460	0.121
	(0.0180)		(0.0290)	
car	−0.825	0.254	−0.480	0.564
	(0.725)		(0.855)	
risk	0.674	0.168	1.225	0.122
	(0.546)		(0.821)	
liquidity	−0.00768***	0.004	0.000382	0.948
	(0.00277)		(0.00509)	
facr	0.0583***	0.001	−0.0183	0.487
	(0.0179)		(0.0276)	
efc	0.0412*	0.070	−0.000698	0.979
	(0.0181)		(0.0233)	
sub	−0.149	0.108	−0.0891	0.498
	(0.0899)		(0.129)	
Constant	−11.69	0.185	−19.91	0.134
	(8.529)		(13.35)	
sigma	0.175***		0.275***	
	(0.0297)		(0.0462)	
Observations	40		40	

Note: Standard errors in parentheses; ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Source: Computed by the author using Stata12.

The coefficient of liquidity ratio is negative (−0.00768) as expected which in contrast of the expected sign and it implies that there is negative effect of liquidity on the financial performance of CamCCUL in 2017. In fact, this result sug-

gests that there is positive effect of MFI liquidity on the financial performance of CamCCUL in 2017. An increase in the liquidity of MFIs affiliated to CamCCUL will bring about an increase in the financial performance of these MFIs by about 0.008 everything being equal. It should be noted that this result is significant at 1% level implying that the variable is crucial for policy recommendations towards improving the financial performance of CAMCCUL microfinance institutions during this period of Anglophone crisis.

Unlike liquidity, the coefficient of fixed assets coverage ratio is positive (0.0583) which is in conformity with the expected sign. It indicates that there is a positive effect of FACR on the financial efficiency of CamCCUL in 2017. Put differently, higher fixed assets coverage reduces the financial efficiency of CamCCUL by about 0.058 in 2017. Just like the previous variable, this finding is statistically significant at 1% level. We can therefore conclude that there is a negative and significant effect of fixed assets coverage on the financial efficiency of CamCCUL in 2017.

Similarly, there is a negative effect of external funding coefficient on the financial efficiency of CamCCUL in 2017 as the coefficient of EFC is positive (0.0412) indicating that external funding increases financial inefficiency of the MFIs affiliated to CamCCUL. More precisely, an increase of external funding coefficient by 1 unit will lead to 0.04 fall in the financial efficiency score of the network. It should further be noted that this result is significant at 10% level which renders the variable important for policy designing.

A negative coefficient of subvention simply indicates that MFIs which receive subsidies in 2017 were less likely to be financially inefficient as compared to those who did not receive. Put otherwise, receiving subventions increased the financial performance of CamCCUL affiliated MFIs in 2017. However, this outcome is not significant at all.

Looking at factors affecting the social performance of CamCCUL in 2017, results from data analysis indicates that social efficiency is positively determined by capitalisation, external funding coefficient, fixed assets coverage ratio and subventions. The positive effects of subventions on both financial and social efficiency somehow confirm the welfarist postulate indicating that MFIs need assistance in order to meet up with their dual mission of financial and social performance. On the other side, risk coverage ratio and liquidity ratio compromise the social efficiency of CamCCUL in 2017. Though the quadratic effect of the size of the MFI indicates the existence of a minimum size of MFI after which the effect of size of MFI on the social efficiency CamCCUL in 2017 becomes positive, it should be noted that none of the variables included in the model were found to be statistically significant.

Consistently with the results of the CamCCUL network in 2017, results from the same network in 2020 as seen in **Table 7** indicate that there is quadratic effect of size of the MFI on the efficiency of MFIs affiliated to CamCCUL. This U-shape relationship is materialised by the existence of a minimum size after

which the MFIs affiliated to CamCCUL begin to enjoy economies of scale. It should also be noted that the results are significant at 1% for the financial efficiency coefficients and, 10% and 5% respectively for size and size squared in the social efficiency model.

The coefficient of capitalisation is negative (−0.0953) which is not in conformity with the expected sign. It indicates that there is a negative effect of capital adequacy ratio on the financial inefficiency of CamCCUL in 2020. Put otherwise, higher capitalisation of MFIs affiliated to the CamCCUL network increases the financial efficiency in 2020 whereas the effect is reversed when looking at social efficiency. Both coefficients are statistically insignificant.

Table 7. Determinants of efficiency of CamCCUL 2020.

	(1)	(2)	(3)	(4)
VARIABLES	Financial inefficiency	$p > \|t\|$	Social inefficiency	$p > \|t\|$
size	15.35***	0.003	3.222*	0.062
	(4.406)		(1.408)	
$size^2$	−0.436***	0.002	−0.0675**	0.044
	(0.0985)		(0.0365)	
car	−0.0953	0.907	0.0327	0.485
	(0.406)		(0.0366)	
risk	−0.295	0.218	−0.760**	0.038
	(0.232)		(0.382)	
liquidity	−0.000496	0.988	0.0279	0.422
	(0.0285)		(0.0244)	
facr	0.00334	0.788	−0.000618	0.987
	(0.00623)		(0.009832)	
efc	−0.0328*	0.098	0.0762***	0.009
	(0.0234)		(0.0323)	
sub	−0.210*	0.081	−0.201	0.434
	(0.0743)		(0.338)	
Constant	−321.6***	0.002	−22.55*	0.081
	(541.50)		(13.05)	
sigma	0.223***		0.372***	
	(0.0311)		(0.0400)	
Observations	40		40	

Note: Standard errors in parentheses; ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Source: Computed by the author.

Both coefficients of risk coverage ratio in the financial and social inefficiency models are negative signifying that there is a negative effect of risk coverage on the financial and social performance of CamCCUL in 2020. In fact, increase in risk coverage ratio by a unit will lead to an increase in financial and social efficiency by 0.295 and 0.76 respectively. However only the coefficient of risk coverage in the social efficiency model is significant at 5%.

Liquidity ratio reduces financial inefficiency of MFIs affiliated to CamCCUL given that the coefficient of liquidity ratio is negative in the financial inefficiency model. This therefore suggests that, increase in the liquidity of the MFIs will bring about an increase in financial efficiency. The effect on social efficiency is the reverse as the more liquid were the MFIs affiliated to CamCCUL in 2020, the less is their social efficiency score. Contrary to liquidity, fixed assets coverage ratio reduces financial efficiency of CamCCUL in 2020 while increasing social efficiency. However, just like liquidity ratio, the coefficients of fixed assets coverage ratio are statistically insignificant.

Higher external funding coefficient (EFC) reduces financial inefficiency as the coefficient of EFC was found to be negative (−0.0328). This result suggests that an increase of external funding coefficient will lead to an increase of the financial efficiency of the network. This result is significant at 10% level. Moreover, the external funding coefficient was found to compromise social efficiency of CamCCUL in 2020 as the coefficient of EFC in the social inefficiency model is positive. This therefore implies that, increase in the debt to equity ratio of the MFIs affiliated to CamCCUL will bring about a fall of the social performance of the network. This second outcome is significant at 1% level.

Another key determinant of CamCCUL network financial efficiency in 2020 is subventions. The negative sign of subvention in the financial inefficiency model simply indicates that MFIs which receive subsidies in 2020 are less likely to be financially inefficient (and therefore more likely to be financially efficient) as compared to the MFIs which did not receive any subventions. This finding is significant at 10% level. Also, though the coefficient of subvention in the social inefficiency model is negative, no significant effect can be established. This implies that there is a positive but insignificant effect of subvention on the social efficiency of the network in 2020.

4.5. Discussion of Findings

First and foremost, results from the data envelopment Analysis indicate that MFIs affiliated CamCCUL network located in the Northwest and Southwest Regions are performing poorly in terms of social performance and financial performance during this period of Anglophone crisis however, there has been a slight improvement both in terms of social performance and financial performance from the year 2017 when the crisis was at its peak and in the year 2020 when things got better. Results also showed that some MFIs affiliated to CamCCUL have shifted their mission gradually towards more financial profit-

ability(Sustainability) by establishing in big cities sometimes at the detriment of their social mission (Outreach) as rural mini banks. Some MFIs affiliated to CamCCUL have grown very big that they operate at times like traditional banks up to the level of quitting the network.

Going by the determinants of financial and social efficiency of CamCCUL networks, results indicate that there is a U shape relationship between the size of the MFIs and the efficiency of the MFIs. This simply indicates that as the size of the MFIs increases, it first reduces the financial and social efficiency of the MFI (diseconomies of scale) up to a certain minimum point after which the institution begins to enjoy economies of scale (positive effect of size on efficiency). This result is in line with the theory of the firm which postulates that as the size of the firm is increasing, it is more likely to experience economies of scale. These economies of scale in the microfinance industry may result from the proper management of the agency problems. In fact, increasing size of the MFI may translate into better risk management, reduction of information asymmetries and increase diversification of portfolio which in the long run may be source of higher financial and social efficiency. However, this result contradicts the postulate of Soulama (2013) who claim that there are risks associated with increasing size of the MFIs as it may lead to depreciation of the portfolio quality, shift in the mission of the MFI and loss of microfinance peculiarities. This outcome is in line with the findings of Tchakouté Tchuigoua (2010) who found a positive effect of size of the MFI on their performance and confirmed the existence of a U shape relationship between the two variables.

Furthermore, no significant relationship could be established between capitalisation (measured by capital adequacy ratio) and both network efficiency though in almost all the results capitalisation was found to exert a positive effect on the efficiency of the MFIs. This result is in contradiction with the finding of De Jonghe (2010) who found a positive significant effect of capitalisation on the performance of MFIs. With the constant crises experienced in the microfinance industry in Cameroon, capitalisation failed to play its role of a signal of solvability of MFIs in Cameroon as a whole. Many microfinance customers even fail to use such indicators prior to joining the MFI given that this information is hardly available to the public.

Risk coverage ratio was found to increase social efficiency in the CamCCUL network in 2020. This result is in line with our priori expectation. This finding is in disagreement with the finding of Akume and Badjo (2017) who found that risk coverage ratio compromises the efficiency of the CamCCUL network in Cameroon. This disconformity can be attributed to the period of study (2009 for the study by Akume and Badjo (2017) as opposed to 2020 for the present study). Also, Akume and Badjo (2017) combined both the financial and social efficiency in a single score which is not the case in our study. A better risk management characterised by high risk coverage guarantees financial efficiency without which social efficiency cannot be guaranteed.

Subvention was found to influence efficiency of MFIs in Cameroon positively which confirm our theoretical expectation and also falls in line with the welfarist approach to microfinance. Subventions help the MFIs to reach the maximum number of customer and thus increasing their outreach. This result is tandem with the finding of Fall (2018) who found a positive effect subvention on the performance of MFIs in the WAEMU zone for the period running from 2000 to 2010. This is an indication that some of the credit unions have not yet reached financial sustainability and still need subsidies to survive especially in the rural area where infrastructure is still very poor translating into high operational costs for the rural institutions.

5. Conclusion and Policy Implications

The main objective of this study was to assess the effect of the Anglophone Crisis on Outreach and Sustainability of MFIs affiliated to CamCCUL located in the North West and Southwest Regions of Cameroon. In order to attain this objective, we adopted a two steps analysis. Firstly, we estimated the efficiency coefficients of 40 MFIs affiliated to Cameroon Cooperative Credit Union League for the year 2017 and 2020 using the Data Envelopment Analysis (DEA) method. Then, we analyzed the determinants of these efficiency score using a censored Tobit model. At the end of this methodological approach results indicate that, on average, MFIs affiliated to CamCCUL are inefficient both socially and financially though there is a slight improvement in 2020 as compared to their performance in 2017 when the crisis was at its peak. This shows that outreach and Sustainability of MFIs affiliated to CamCCUL located in the North and Soutwest Regions of Cameroon are higher affected by the Anglophone Crisis.

In line with the above conclusion, a number of recommendations are made:

Firstly, we recommend that the President of the Nation should put in all his best to restore calm and put an end to the crisis since it's affecting the economy negatively as well as the performance of MFIs and other businesses in the two Anglophone regions.

Secondly, from our analysis, we realized that subsidies play a vital role as far as outreach and sustainability of MFIs in Cameroon are concerned. We, therefore, call on the Government to highly subsidise MFIs located in the North and Southwest Regions in Cameroon to help them reach their social and financial objectives in the midst of this Anglophone Crisis.

Thirdly, to the management board of MFIs located in the Northwest and Southwest Regions of Cameroon, they should adopt good governance practices that will help them govern these organizations well if they have to survive in the midst of the Anglophone Crisis.

Also, we suggest the implementation of a national regulation framework taking into account national and local realities by all microfinance stakeholders. The fact that it is designed at regional level does not account for the national and local environments, especially for the rural institutions.

Furthermore, government, together with other microfinance stakeholders should create a rating agency in order to evaluate and publish the performance of MFIs so that problems will be detected at early stage and tackled in order to avoid crisis in the sector.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Akume, D., & Badjo, M. A. (2017). The Performance of Microfinance Institutions in Cameroon: Does Financial Regulation Really Matter? *Research Journal of Finance and Accounting, 8,* 29-41. https://doi.org/10.1146/annurev-orgpsych-031413-091235

Bakker, A. B., Demerouti, E., & and Sanz-Vergel, A. I. (2014). Burnout and Work Engagement: The JD-R Approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1,* 389-411. https://doi.org/10.3846/1611-1699.2009.10.31-43

Bassem, B. S. (2009). Governance and Performance of Microfinance Institutions in Mediterranean Countries. *Journal of Business Economics and Management, 10,* 31-43.

Council of Microfinance Equity Funds (2012). *67th China International Medicinal Equipment Fair*. Council of Microfinance Equity Funds.

De Jonghe, O. (2010). Back to the Basics in Banking? A Micro-Analysis of Banking System Stability. *Journal of Financial Intermediation, 19,* 387-417. https://doi.org/10.1016/j.jfi.2009.04.001

Fall, F. (2018). Efficiency of MicroFinance Institutions in UEMOA: An Outreach and Financial Intermediation Approach. *Revue d'économie politique, 128,* 667-689. https://doi.org/10.3917/redp.284.0667

Gonzales, R. (2010). Motivational Orientation in Foreign Language Learning: The Case of Filipino Foreign Language Learners. *TESOL Journal, 3,* 3-28. https://doi.org/10.2139/ssrn.2746312

Hartarska, V. (2005). Governance and Performance of Microfinance Organizations in Central and Eastern Europe and the Newly Independent States. *World Development, 33,* 1627-1643. https://doi.org/10.1016/j.worlddev.2005.06.001

Hollis, A., & Sweetman, A. (1998). Microcredit: What Can We Learn from the Past? *World Development, 26,* 1875-1891. https://doi.org/10.1016/S0305-750X(98)00082-5

Kyereboah-Coleman, A., & Biekpe, N. (2005). The Relationship between Board Size, Board Composition, CEO Duality and Firm Performance: Experience from Ghana. *Corporate Ownership and Control, 4,* 114-122. https://doi.org/10.22495/cocv4i2p11

Kyereboah-Coleman, A., & Osei, K. A. (2008). Outreach and Profitability of Microfinance Institutions: The Role of Governance. *Journal of Economic Studies, 35,* 236-248. https://doi.org/10.1108/01443580810887797

Labie, M. (2001). Corporate Governance in Microfinance Organizations: A Long and Winding Road. *Management Decision, 39,* 296-302. https://doi.org/10.1108/00251740110391466

Lafourcade, A. A., Isern, J., Mwangi, P., & Brown, M. (2005). *Overview of the Outreach and Financial Performance of Micro-Finance Institutions in Africa*. http://www.mixmarket.org

Lapenu, C., & Pierret, D. (2006). *Handbook for the Analysis of the Governance of Microfinance Institutions*. IFAD (International Fund for Agricultural Development).

Lelart, M. (2006). *De la finance informelle à la microfinance*. https://www.researchgate.net/publication/5086578

Mersland, R., & Øystein Strøm, R. (2009). Performance and Governance in Microfinance Institutions. *Journal of Banking & Finance, 33,* 662-669. https://doi.org/10.1016/j.jbankfin.2008.11.009

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, Countinuance, and Normative Cpmmitment to the Organization: A Meta-Analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behavioral, 61,* 20-52. https://doi.org/10.1006/jvbe.2001.1842

Morduch, J. (2000). The Microfinance Schism. *World Development, 28,* 617-629. https://doi.org/10.1016/S0305-750X(99)00151-5

Navajas, S., Schreiner, M., Meyer, R. C., Gonzalez-Vega, C., & Rodriguez-Meza, J. (2000). Microcredit and the Poorest of the Poor: Theory and Evidence from Bolivia. *World Development, 28,* 333-346. https://doi.org/10.1016/S0305-750X(99)00121-7

Soulama, S. (2013). Teneurs en coumarines de 15 ligneux fourragers du Burkina Faso. *International Journal of Biological and Chemical Sciences, 7,* 2283-2291. https://doi.org/10.4314/ijbcs.v7i6.9

Tchakouté Tchuigoua, H. (2010). *Microfinance Institutions Performance. What Matters about the Interaction of Location and Legal Status?* (Working Papers CEB 10-038). ULB (Universite Libre de Bruxelles)

Woller G. M., & Woodworth, W. (2001). Microcredit as a Grass-Roots Policy for International Development. *Policy Studies Journal, 29,* 267-282. https://doi.org/10.1111/j.1541-0072.2001.tb02091.x