

Implementing Maturity Mismatch with Good Governance: What Lessons from the Raiffeisen Model for West African Microfinance Cooperatives?

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Abstract: The lack of long-term loans supply remains the main limit of rural microfinance. This article shows how today's West African microfinance cooperatives could learn from the historical German Raiffeisen model to address this issue. Financial cooperatives have short-term internal resources. Thus, providing long-term loans requires dealing with a maturity mismatch, which in turns leads to governance issues. The 19th century German financial cooperatives provided long-term loans (ten years and more) thanks to two mechanisms: the liquidity facilities from regional centrals and an efficient corporate governance system based on cooperative auditing associations. We discuss the implementation of those mechanisms in today's West Africa and come up with policy-oriented recommendations.

Keywords: microfinance, cooperative, governance, long-term loan, maturity mismatch, West Africa, Germany

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1. Introduction

The recent financial crisis has stressed the importance of saver protection and the crucial need to define adequate prudential ratios for the banking sector. The traditional view on banking activities opposes savers to shareholders (Jensen and Meckling, 1976; Diamond, 1984). Interestingly, in financial cooperatives (FCs), there is no such opposition as FCs members are simultaneously owners and clients (be they savers or borrowers). As a consequence, the classical profit-maximizing approach falls short and the stakeholders' approach turns out to be more adequate (Freeman and Reed, 1983; Hill and Jones, 1992; Cuevas and Fischer, 2006). This paper is about the corporate governance designs that help tackle the mismatch issue in microfinance cooperatives. Based on the 19th century German experience, it draws lessons for the current FCs in microfinance that have experienced a fruitful development in West Africa.

In FCs, several conflicts of interest arise, notably among members, such as the one opposing short-term savers to long-term borrowers. FCs are characterized by short-term savings, which act as a governance mechanism by encouraging monitoring by savers. Indeed, quickly demandable savings enable savers to directly "vote with their feet" (opt out) and leave the organization if they lose trust in the managers (Calomiris and Kahn, 1991). However, FCs face substantial demand for long-term financing and are pushed to lend on the long-term with short-term resources. The resulting maturity mismatch acts as an incentive to recover credits on time, but increases the liquidity risk, like in the classical banking industry.

As a matter of fact, the rural sector requires credits of different durations: typically short-term loans to finance crops, animals fattening and storage of agricultural goods; mid-term loans to finance agricultural machineries and equipments or to replace production tools such as plows or draft animals; and long-term loans to finance heavy equipments, plantation of sustainable crops, or to buy lands (Wampfler, 2002; Christen and Pearce, 2005). These

longer-term loans are essential to support rural area development and favor investments in order to increase scale and productivity of farming operations, to change farming strategies (new plantation, transformation, synergies with other activities) or to exploit new market opportunities.

Unfortunately, the lack of mid-term and long-term loans supply remains the main limit of rural microfinance (Hollinger (FAO/GTZ), 2004; Lolila-Ramin (CGAP), 2005; Wampfler *et al.*, 2007).² Microfinance institutions (MFIs) favor urban and short-term credits, which are less risky and fit better with their lending methodologies. Being members-owned organizations, FCs are more sensitive to their clients-members' needs. Thus, through their democratic structure, they may offer a privileged way to circumvent this drawback of MFIs.

West Africa is mainly rural and the microfinance sector there is dominated by the cooperative status. However, it suffers from a lack of investment credit offer in rural areas (Lesaffre, 2000; Hollinger (FAO/GTZ), 2004; 4th Pan-African Microfinance Conference, July 2009), even if different FCs try to tackle this issue.³ Indeed, West African FCs lack internal long-term resources because their members are poor and require quick access to their funds in case of shocks. Adapted governance designs are therefore needed to allow for fruitful delivering of long-term loans. Past Northern experience can provide guidelines in this way.

No need to reinvent the wheel: Microfinance is not a new concept and historical analyses are especially relevant for cooperatives, which are “the single most enduring and wide spread form of MFIs in the world” (Hollis and Sweetman, 1998). The Raiffeisen model was one of the strongest early European cooperative experiences and had highly inspired other coop movements, such as in Ireland or Italy, to become important financial

² According to the FAO/GTZ study (2004), “Even in countries that have implemented financial-sector reforms for development of the financial market and often have a booming ‘microfinance industry’, the availability of term finance for small and medium-scale farmers has remained extremely limited or non-existent”.

³ Such as, Kafo Jiginew (Mali) and RCPB (Burkina Faso): investment loans represented 13.4% of the total outstanding loans portfolio for Kafo Jiginew in 2005 and 30% for RCPB in 2004. RCPB decided not to respect the Parmec “maturity ratio”: its long-term resources covered less than 70% of its long-term uses, which was far from the 100% required by the law (Lai and Javoy, 2005). In contrast, despite the high demand, Kafo Jiginew has limited longer-term credits to respect the ratio (Levard and Diop, 2005).

intermediaries almost everywhere in Europe. Regarding the issue tackled in this paper, of all European FCs' experiences, the 19th century German FC model was the most successful in providing long-term loans. Hollis and Sweetman (1998) have compared different 19th century microfinance experiences: an English lending charity, two systems of loan funds in Ireland, and three credit cooperative movements in Germany, Ireland, and Italy. Among those experiences, the German cooperatives were the one providing loans with the longest term. In France, early FCs provided short-term loans only, until 1910 when a new law allowed them to broaden their offer and provide individual long-term loans (Gueslin, 2002).

Set up in the 1850s, the rural FC movement in Germany was successful in reducing market failures and offering long-term loans to non-bankable population with resources mainly available on the short-term. Guinnane (forthcoming) shows the relevance of comparing German FCs with modern MFIs. Regarding long-term loans issues, we argue in this paper that two main mechanisms were at work in Germany, and those could be valued in the West African microfinance context.

First, liquidity management facilities were provided by regional centrals to which most German FCs were linked on a contractual base. This architecture preserved small-size local FCs with low information asymmetry, while providing them with liquidity capacities. In West Africa, networking exists, but with higher integration implying less local autonomy. Also, many FCs are still isolated. We therefore argue for the implementation of cooperative centrals (or banks) allowing isolated FCs to benefit from additional services. Following the German experience, this could be done on a contractual basis and with diversified centrals by grouping financial and non-financial cooperatives. The second mechanism at work in Germany was an efficient corporate governance system based on cooperative auditing associations. The system was autonomous and included a re-auditing process and specific schools for cooperatives auditors. In West Africa, the State-based external governance

mechanisms are rather weak. International aid could strengthen this supervision and help the national supervisory institutions to achieve their mission. Besides, external independent supervision could be put in place through cross-inspections inside confederations, and through synergies between FCs and farmers' organizations. Finally, specific trainings could make auditors aware of the cooperatives' needs.

The *Parmec* Law, which regulates the West African microfinance sector, forbids maturity mismatch. We argue that this interdiction should be relaxed at least partially.

The paper is organized as follows. Through the case of West Africa, section 2 analyses the situation of today's microfinance cooperatives and stresses the challenge of long-term loans offer. Section 3 theorizes the governance issues generated by FCs' long-term credits supplying and assets-liabilities management (ALM). Section 4 presents the 19th century German FCs' experience and shows how these organizations overcame the governance issues to provide long-term loans. Building on a comparison with this historical experience, Section 5 makes recommendations for West African MFIs' governance. Section 6 concludes.

2. The Current Situation of West African FCs

The microfinance sector in West Africa is dynamic and characterized by a high domination of the cooperative status. Based on literature and our field research⁴, this section first draws a picture of West African FC sector, then it stresses the FCs' asset and liabilities management (ALM) issue.

According to BCEAO statistics, for the WAEMU⁵ in 2006, FCs served 3,688,185 members through 2,083 services points, collected a total of 280,536 million FCFA, and

⁴ Field research conducted in the MUFEDE, a Burkinabe FC (November 2008), in the FONGS, a Senegalese network of farmer organizations with associated FCs (February 2007, June 2009), and in Pamecas, a Senegalese FCs network (January 2010).

⁵ The West African Economic and Monetary Union (WAEMU) or the *Union Économique et Monétaire Ouest Africaine* (UEMOA) is composed of Benin, Burkina Faso, Republic of Côte d'Ivoire, Guinea Bissau, Mali,

provided credit for a total of 266,494 million FCFA⁶. The West African FC sector is structured in networks composed of local units optionally affiliated with a central union. At the upper level, unions may be affiliated with a federation and then with a confederation. In 2005, the BCEAO recorded in West Africa: 8 federations, 68 unions, 1,599 local FCs linked to unions, and 735 unaffiliated FCs. Although local FCs legally keep their independence, networks are considered as single organizations and have to produce consolidated annual accounts (BCEAO, Condensé n°17, 1995). The relation between the network's levels is regulated by the "subsidiarity" principle (Desrochers and Fischer 2005): tasks are transferred to the upper level only if either local FCs cannot fulfill them, or if large economies of scale are at stake. Most large networks add a second principle, justified by the group interconnection, according to which centrals may take the full control of FCs facing serious troubles threatening their viability (Ouedraogo, 1997). The networks' dimensions are extremely variable. Starting from a group of a few tiny FCs', networks can also reach large groups like the "*Confédération des Institutions Financières*" (CIF), which brings together six large FC networks.⁷ In 2004, in the WAEMU, CIF served 38% of the microfinance clients, collected 42% of all savings, and provided 32% of all credits (Ouedraogo and Gentil, 2008).

The networking dynamic is encouraged by the States in order to facilitate the sector supervision. Indeed, the external control of FCs is ensured by each national Ministry of Finance with the support of its Central Bank (BCEAO, Condensé n°17, 1995), but they lack human and financial resources to achieve their mission. For example, in 2007, the Senegalese Ministry of Finance registered 507 FCs under its supervision, but it is only able to conduct around 40 inspections per year.⁸ When affiliated to a network, FCs benefit from an

Niger, Senegal and Togo. In this paper, we focus on these countries, which share a common microfinance cooperatives regulatory law: the *Parmec* law.

⁶ It is respectively equal to 427.6 million € and 406.2 million €.

⁷ These six Networks are located in five countries: RCPB (Burkina Faso), Pamecas (Senegal), Fucec (Togo), Fececam (Benin), and Kafo Jiginew and Nyesigiso (Mali).

⁸ Information from a MMD employee's interview, conducted by ourselves in June 2009.

additional yearly “semi-external” control conducted by qualified technicians employed by the union (BCEAO Condensé n°17, 1995).

The microfinance sector in the WAEMU is regulated by the *Parmec* Law for cooperatives (edited in 1993 and reviewed in 2008) and a framework convention for non-coop MFIs. This system favors the cooperative status for MFIs⁹ and introduces strict regulation. The *Parmec* Law imposes minimal prudential ratios and an interest rate ceiling of 27%. It also defines the FCs’ internal structures as including three governance bodies in addition to the General Assembly: the administration committee (AC), the credit committee (CC), and the supervisory committee (SC). These bodies face several difficulties, but the worse seems to be the members’ lack of skills (Branch and Baker, 2000; Ouedraogo and Gentil, 2008), attributable to low education (Pearce, 2009).¹⁰ Also, the staff is often only composed of one or two workers with low salaries, which impedes FCs in attracting qualified staff (Branch and Baker, 2000).¹¹

Most importantly, the *Parmec* Law forbids high maturity mismatch: “long-term expenses must be strictly covered by stable resources” (BCEAO 1998, our translation from French)¹², which strongly constrains ALM. Indeed, West African FCs provide intermediation services. Savings services are one of their main comparative advantages over the MFIs with a NGO status (Robinson, 2001). Also, savings drive an essential governance mechanism for FCs (Banerjee *et al.*, 1994; Armendariz and Morduch, 2005). In 2006, savings represented on average 74% of the total West-African FCs’ liabilities: 57% short-term savings, 8% long-term

⁹ But in a much lower extent in the new law: it represents one of the main recent changes in the legislation.

¹⁰ The literacy rate in West Africa is extremely low. At the world level, seven out of the ten countries having the lowest one are located in this area (Pearce, 2009).

¹¹ Slowly though, as the hiring policy changes with growth, an important part of the wealth created by the organization tends to go to employees (Périlleux, Bloy and Hudon, 2009).

¹² It means that mid-term and long-term credits (respectively from 12 to 36 months and for more than 36 months), deposits in banks for over a year, and fixed assets have to be covered by term loans, fixed-term deposits (more than one year), retained earnings, or capital (Decree Article n°51, “Instruction n°06: terms of prudential ratio determination”, BCEAO 1998).

savings, and 9% other savings (e.g., compulsory).¹³ West-African FCs are “closed-coops”: only members have access to services (BCEAO, 1995). This reduces the number and diversity of potential depositors. However, being a member is not very demanding.¹⁴ The cooperative’s assets are composed mainly of credits to members.

As maturity mismatch is forbidden and short-term resources (current savings accounts) are predominant, FCs’ portfolios principally include short-term loans. In order to increase credits for investment without having to face a maturity mismatch, FCs need either to attract long-term deposits, or to contract external debts, both solutions being difficult challenges for African MFIs.

3. ALM: Long-term credits and governance risks

In order to facilitate financial intermediation and promote growth, the assets and liabilities management is recognized as a key factor to ensure efficiency and deal with maturity mismatch (Berthélemy and Varoudakis, 1994; Hollinger, 2004). Indeed, financial institutions transform short-term resources into longer-term resources, but this transformation has to be controlled to avoid excessive liquidity risk exposure. This trade-off is especially relevant for FCs, as they are characterized by very short-term resources and members’ long-term credit needs.

In FCs, members are split into net savers and net borrowers with different interests. Concerned by the safety of their savings, net savers tend to promote a too restrictive credit policy. Conversely, net borrowers push the cooperative to adopt reductions on interest rates for loans. For the FCs’ viability, the optimal situation is a balance between the two categories (Branch and Baker, 2000).

¹³ External debt and subsidies reached respectively 10% and 2%, and equity 14% of total liabilities.

¹⁴ Members’ fees are low and liability is limited. Therefore, compulsory membership is less discouraging than in 19th century German FCs where unlimited liability was the rule.

To finance long-term credits, FCs have two options, both leading to specific governance issues. The first option is to use external long-term financing. While avoiding maturity mismatch, this strategy changes the members' proportion of net savers and net borrowers. A high proportion of external funding leads to a net borrowers' domination, which represents a threat to the FC's viability. Also, external funds reduce the members' feeling of "borrowing from their neighbors" (Krahn and Schmidt, 1999) and lower their motivation to reimburse the loans. Indeed, members' savings favor peer monitoring and represent vital governance mechanism (Banerjee *et al.*, 1994; Armendariz and Morduch, 2005). For instance, Guinnane (1994) explains that lack of savings in the FCs was one of the main reasons explaining the poor results of the transplant of the German model to Ireland.

The second option is to use internal resources, coming from members' savings, to provide long-term credits and limit the needs for external funding. This practice avoids a net borrowers-members' domination but causes a higher liquidity risk that compromises the FC's viability and requires management liquidity facilities such as emergency loans in critical situations.¹⁵

As both options for supplying long-term credits are risky, they require good governance and efficient control mechanisms. In the 19th century, when they first appeared in rural Germany, FCs were very concerned to bring solutions to their members' needs and, therefore, to provide long-term loans and implement satisfactory governance mechanisms to support the system.

¹⁵ This second option's risk is the most important for the FCs' members. Indeed, the collapse of a FC financed by external funds compromises its future access to credits whereas the collapse of a FC financed by internal resources induces losses of members' savings.

4. Experience of the 19th century German FCs

The 19th century German FCs took up the challenge of providing long-term credits with short-term resources. This section presents these organizations and explains how they managed to reduce the risk linked to maturity mismatch.

Developed in the 1850s, the German FCs grew rapidly and, in 1910, reached 17,620 institutions serving 3,619,000 members. In 1913, they were holding 6.8% of all German banking assets.¹⁶ The first Reich cooperative law was edited in 1889 and represented a historical turning point for German FCs as it allowed coops to have limited liability and to be members one of another. Also, it forced FCs to be audited twice a year. By doing so, this law favored the development of regional centrals and auditing associations (Guinnane, 1997; Emmons and Mueller, 1997).

The FCs' internal structure was flexible and not described by the law. In most FCs though, two committees were in place: the management committee (MC), that took the main decisions such as accepting new members or granting loans, and the supervision committee (SC), that monitored the treasurer's activities and the soundness of the cooperative (Guinnane, 2003). The division of tasks between these two committees and the treasurer was only loosely defined, so that some overlapping did occur. The human environment is also worth mentioning. FC members benefited from basic knowledge thanks to universal primary education. Also, membership was rather diversified in terms of skills: management committees were often composed of local businessmen and farming leaders, while supervisory committees tended to include local nobles or clergymen (Guinnane, 2003). In addition, weak rotation allowed elected members to accumulate knowledge on their

¹⁶ The sector was split into three main cooperative movements: Schulze-Delitzsch (urban), Raiffeisen (rural) and Haas (rural) (see Guinnane, 2002). In this paper, we focus on the rural German FCs.

cooperative. Finally, although the treasurers were generally schoolteachers or farmers with no specific management skills, they were well paid, which motivated them for doing a good job.

Generally, German FCs offered adequate savings products and had little trouble collecting savings. Their “open-coop” structure helped collecting savings from wealthier people who could have been reluctant to become FC members (Emmons and Mueller, 1997). Mersland (forthcoming) confirms that serving wealthier people was instrumental for the viability of historical Northern microfinance institutions such as savings banks. In Germany, savings were mostly short-term but not demandable. The waiting time for withdrawing savings was at least three months and could reach up to six months (Guinnane, 2001). Funding also came from equity and debts, but to a much lower extent. In order to preserve their social capital and informational advantages, German FCs limited membership to small communities (Kotz and Nagel, 2002; Prinz, 2002).¹⁷ They did not provide credits to outsiders from the village, except for very profitable loans (Guinnane, 2001). In contrast, they offered very-long-term credits to their members, sometimes over 10 years¹⁸.

German FCs were characterized by a high maturity mismatch between their liabilities and assets. They met their members’ long-term financial needs with short-term internal resources, therefore avoiding net borrowers’ domination. Although rural FCs were “*especially ill-liquid*” (Guinnane, 1997), two elements tempered their liquidity risk. First, even if they were short-term, their members’ savings were very stable. Second, the coop regional institutions further contributed to reduce the risk of maturity mismatch.

Indeed, German FCs were structured at regional level through centrals and auditing associations. Regional centrals had objectives such as facilitating the liquidity management of

¹⁷ Small size is often put forward as a factor of success as it reduces informational asymmetries. For instance, in current mutual guarantee institutions, as Columba *et al.* (2009) have shown: bigger size could lead to poor screening and reduce monitoring incentive.

¹⁸ According to Guinnane (2001, p. 379): “*Commercial banks typically relied on 90-day loans. [Whereas] Long-term loans represented a huge proportion of the FCs’ portfolios: Analysis of the Raiffeisen federation’s annual reports shows [...] [that] the preponderance of loans were made for one year or longer, with nearly half made for ten years or longer.*”

local FCs, smoothing seasonal fluctuations, acting as a “lender of last resort”, and helping FCs find outlets for investment (Guinnane, 1997; Kotz and Nagel, 2002). A bottom-up relation linked FCs to their centrals: local FCs were members-owners of the central and benefited from on-demand services. This contractual and exclusive relation favored a decentralized functioning allowing FCs be locally autonomous. German centrals were diversified as they brought together all kinds of cooperatives, not only financial ones. As a consequence, FCs’ surpluses were made available to other cooperatives, keeping the resources within the cooperative sector. Also, it is worth mentioning that contrary to the rural experience, Schulze-Delitzsch urban FCs used the Dresdner Bank as their central. This bank was a large professional institution able to provide a huge variety of services, but with no special commitment to coops, unlike Haas or Raiffeisen rural centrals.

Auditing associations, set up by coops’ leaders as independent supervisory systems, avoided dependence from the State. As the auditors worked only with cooperatives, they were specialists. Moreover, they had incentives to act as controllers and advisors (Guinnane, 1997)¹⁹. They efficiently helped FCs to tackle mismanagement from –often less-skilled– managers and treasurers, as a scandal in one FC would affect the image of the whole movement. Embezzlement was rare but potentially detrimental. To strengthen the system, special schools were created for cooperative auditors as well as a re-auditing process with “*super-auditors*” (Guinnane, 2003).²⁰

Maturity mismatch was thus addressed in two ways. Firstly, centrals provided “emergency loans”, “liquidity facilities”, and other services, including smoothing seasonal fluctuations and “last resort” lending. Secondly, auditing associations brought financially-

¹⁹ They corrected bookkeeping errors, gave accounting managerial advices, alerted the FC about imprudent practices, and provided incentives for the treasurer to do a good job.

²⁰ This auditing system was very efficient. Local FCs could resort to private auditors and were not obliged to deal with cooperative auditing associations, but they were encouraged to resort to these associations as they brought consequent additional advantages.

skilled agents to the FCs for control and counseling. This virtuous combination favored strong confidence from the members.²¹

5. Lessons from the 19th century German FCs

Building on the German experience, this section draws policies in order to improve long-term loans services provided by today's West African FCs. However, it does not mean a transplant of the German model as such²². The context differences are important. To some respects, FCs' activities were harder to develop in 19th century Germany than in today's West Africa. The lack of communication technologies made exchanges more difficult, both nationally and internationally. All documents were hand-written.²³ From another angle, 19th century Germany was more favorable to FCs' activities. The regulation was flexible. The schooling system was better, thanks to universal primary education. The farmers' situation was more stable²⁴ and GDP per capita was higher in Germany.²⁵ The emergence of FCs was also different: in Germany, the cooperative movement emerged endogenously²⁶, whereas in West Africa, it was pushed forward by Northern NGOs and international aid in such a way that, in many cases, FCs' creation can be considered as relatively exogenous.

However, key context similarities should be highlighted. Throughout the 19th century, a main part of the workforce in Germany remained in the primary sector (Lee, 1988). Similarly, in 2005, this sector employed, on average, 37.3% of the population in the WAEMU (World Bank Statistics). Rural exodus, an important issue in West Africa (Macours, Sadoulet, 2008), was also present in 19th century Germany (Gibson, Blinkhorn, 1991). More importantly, like in today's West Africa, in the 19th century, German commercial banks did

²¹ Again, this observation goes beyond the German FCs case. For instance, Caprio and Vittas (1997, p15) state that: "*Thrift deposit institutions were stronger in countries where they developed a three-tier structure that combined the local character and autonomy of individual entities with the geographic diversification, liquidity management, and auditing and control services of central regional and national institutions.*"

not serve rural areas and FCs were the only formal institutions providing credit to rural smallholders (Guinnane, 2002).

Building on the previous sections, Table 1 summarizes the comparison between the 19th century German experience and the current situation in West Africa. The German model was decentralized. Voluntarily limiting their size, the autonomous local FCs included around 100 members (Guinnane, 2003)²⁷, but their contractual relation with a central increased their financial capacity.²⁸ In West Africa, small autonomous FCs coexist with the large integrated networks that dominate the sector (Ouedraogo and Gentil, 2008). The West African network model exploits economies of scale, decreases costs, and reduces time-demanding governance bodies, through local FCs' mergers and service points.²⁹ As they grow bigger, however FCs are more exposed to free-riding and poor peer-monitoring.

The German supervisory system acted as a substitute for the State's control. Within West-African networks, the technicians' supervisory teams of the apex strengthen the governance of local FCs and provide advantages comparable to those of German coops auditors, such as acting as controllers and advisors. However, the German auditing scheme

²² Adaptations of the Raiffeisen model were experienced toward the end of the 19th century in Europe, being either: a success story, such as in Italy (Hollis and Sweetman, 1998), or a failure, such as in Ireland. FCs in Ireland reached their maximum number of 268 in 1908, but in 1929, only 30 of the old Irish Raiffeisen FCs had survived. Guinnane (1994) explains that the main reasons of this failure were the lack of savings as a major source of funds for FCs, the inexistence of a strong auditing federation and the norms of rural Irish behavior making people reluctant to put pressure on their neighbors to repay loans. In West Africa, FCs are mainly financed by members' savings. There is an auditing system, but relatively weak and conducted by the State. Finally, social pressures seem to be at work in West Africa (especially through reputation sensitivity), FCs' repayment rate being relatively acceptable.

²³ Even if it is also the case in many small FCs in West Africa, ICTs (Information and Communication Technologies) are an essential management tool for big networks.

²⁴ Nowadays, globalization exposes the farmers to the world agricultural market fluctuations, and global warming changes the agriculture conditions of southern countries.

²⁵ In 1914, the GDP per capita for Germany was \$3,100 (1990 Geary-Khamis dollars) (Guinnane, forthcoming). Although not fully comparable, the present GDPs per capita (current US dollars) of West African countries are significantly lower. In 2008, GDPs per capita for Benin, Burkina Faso, Mali, Senegal and Togo reached respectively \$771, \$523, \$688, \$1,082, and \$437 (World Bank statistics).

²⁶ Even if local leaders did not come from the same social class as FCs' members and had a higher level of education.

²⁷ We focus on rural FCs from the Raiffeisen and Haas movements. The urban FCs were generally much bigger.

²⁸ Rural FCs' centrals had, on average, 442 coop members, including financial as well as non-financial coops.

²⁹ As an example, the networks in the "Confédération des Institutions Financières" are composed of 74 local FCs on average with around 4,000 members per FC (rural FCs in these networks are smaller with around 1,300 members per FC) (Ouedraogo and Gentil, 2008).

was external and more independent, avoiding divergent objectives between promoting and monitoring roles (Hirschland *et al.*, 2008).

Nevertheless, this efficient supervisory system, covering the whole sector and including specific schools for auditors, does not seem globally exportable as such. Therefore, we concentrate on some specific German designs, which may bring useful lessons for West African MFIs.

TABLE 1 HERE: *comparison between the German and West African model*

The two mechanisms that helped German FCs offer long-term loans could be valued in the West African context. The first one is the grouping of liquidity management facilities thanks to the regional centrals system. Following this example, West-African networks should increase their capacities by developing alliances through federations. The CIF represents a young and successful experience of this type. More could be done in the same direction.

However, the high level of integration observed in West-African networks³⁰ deserves further discussion. Are those integrated networks efficient or would exclusive contractual relationships be more adequate? What is better to preserve the FCs' information advantages and avoid members' disinvestments? In our opinion, the German model is more flexible and adapts well to local specificities. Therefore, we argue that West African FCs should set up regional centrals (coop status) or banks in parallel with their networking dynamics. These structures could be organized on a more contractual basis for FCs that would like to keep their autonomy, and could eventually include non-financial coops as well. The bank structure could

³⁰ Although higher networking (e.g., at a sub-regional level) will permit to increase diversification and services capacities of central structure, it reduces local FCs' independence and generates new governance challenges induced by growth. The number of members increases and free-riding behaviors are expected to increase as well. The members could not understand the more complex network's structure. According to Charo-Beroff *et al.* (2000), members' control on second and upper-levels is likely to be very low.

facilitate access to financial market. For instance, the CIF is currently examining the creation of a bank of which it would be the dominant shareholder.

Finally, synergies with the banking sector could be exploited, as the Schulze-Delitzsch urban FCs did in Germany. Using existing private banks as centrals does not seem to fit with the West African reality and banks have no special commitment to FCs. However, both isolated FCs and networks generally have bank accounts to secure their resources, thus synergies are possible. Indeed, thanks to their bank accounts, FCs could broaden their offer with services such as salaries domiciliation or remittances transfers (some FCs are yet starting to provide these services, such as the Pamecas, a Senegalese FCs network). These services are relevant to address the maturity mismatch issue, because they represent a potential source of longer-term resources.

The second mechanism at work in Germany was an efficient corporate governance system based on cooperative auditing associations. In West Africa, the external supervision should be strengthened. As this control is mainly conducted by the State, international aid strategies could focus on improving the capacities of the State supervisory institutions. Also, we recommend the creation of education programs centered on cooperatives' management and auditing.

In addition, autonomous supervision could be launched. A model similar to the German one is likely too ambitious, but some innovations could be introduced. For FCs linked to a farmers' organization affiliated to a farmer movement, the movement could offer a "semi-external" supervision (as experienced by the FONGS, a Senegalese network of farmer organizations with associated FCs). Also, cross-supervision could be implemented between large networks belonging to a confederation, as currently tested by the CIF.

In the 19th century, the German legislation was flexible and allowed huge asset-liability maturity mismatch. In microfinance, the importance to have a specific legislation

differing from banks seems largely shared. Following this view, the *Parmec* Law defines rules and ratios adapted to the FCs. Globally well-adapted, this law has however revealed too rigid regarding maturity mismatch. Therefore, we suggest amending the *Parmec* Law on that issue. The strict ALM rule should be relaxed by adapting the *maturity ratio* for different FCs' categories created in function of their size and their financial soundness. However, to avoid liquidity trap, such relaxation should be performed progressively with great caution and only after having strengthened the governance system and the supervisory framework. This proposition must be seen not as a call for deregulation *per se* but rather as a call for a more efficient –but still regulated– system that takes full benefit from the past German experience.

6. Conclusion

Lessons from Northern countries' past experiences can be enriching for microfinance cooperatives in the South. In particular, West African FCs could find in the German experience interesting tools in order to tackle one of their most important issues: adequately responding to their members' long-term financing needs.

Being characterised by short-term internal resources, FCs have two options to offer long-term loans: use external long-term resources such as borrowing or grants, or use internal resources and deal with a maturity mismatch. Both options require good governance and monitoring. We have shown how some successful German mechanisms could realistically be implemented in the West African context to favor the second option, which has the merit of sticking to the cooperative spirit. However, there is a trade-off between low risks and better services. Without adequate monitoring, a maturity mismatch can be fatal for FCs and can generate dramatic social consequences such as the destruction of poor people's savings. Thus policies have to be implemented very carefully, with a global view taking into account all

plausible consequences. Our study is one step on that way, bringing new ideas into the discussion, through a historical successful experience.

The early German FCs represent a unique experience and the 19th century Germany and today's West Africa are different contexts. Further work could investigate other successful Northern FCs, such as the Canadian Desjardins, Savings Banks (Mersland, forthcoming) and mutual guaranties institutions (see e.g. Levitsky, 1993; Caprio and Vittas, 1997; Columba *and al.*, 2009) in order to broaden the scope of the study and the contribution to microfinance in West Africa. The *Parmec* Law is currently under revision and political stakes, as well as donors' influences, have a strong and complex importance, which is not approached in this paper. Finally other perspectives such as the development of remittances services could be alternative sources of long-term funding for FCs. However, remittances services raise other issues such as the lack of proximity and common bond among members.

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Table 1: comparison between the German and West African models

	<i>Germany: Haas and Raiffeisen</i>	<i>West Africa: CIF Networks³¹</i>
Local FCs		
Size (number of members)	Around 100 members per local FC	Around 4,083 members per local FC - Around 1,291 members per local rural FC (<i>Stat average from Kafo Jiginew and RCPB rural FCs</i>)
Type	Open-coops (<i>with non-member clients</i>) Often unlimited liabilities for members	Closed-coops (<i>only member clients</i>) Always limited members' liabilities
Services	Short, mid and long-term credits (<i>credit for investment</i>)	Short and mid-term credits (<i>very few credits for investment</i>)
Centrals		
Size	Around 442 local FCs per central	Around 74 local FCs per network
Members' type	Financial and non-financial coops	Only FCs
Services	Only financial	Financial + formation + HRM + economies of scale (ICT, others)
Nature of link	Weak - contractual – sporadically - bottom-up: the local FCs are the owners of the central	Strong - highly integrated - sharing identity - bottom-up and top-down relationship
FCs autonomy with regard to the central	Strong – decide all their policies (<i>savings and loans conditions</i>) – legal status separated from the central	Weak – network harmonization – FCs legally recognized but network considered as one organization: consolidated balance sheet
Principles	Contractual	Subsidiary and power repatriation
Legislation		
Law	1889 First Reich Coop Law, very flexible	1993 Parmec Law, strict
Prudential ratios	No prudential ratio – no maturity mismatch restriction	Many prudential ratio – maturity mismatch restriction
Supervision		
Local supervision (SC)	Relatively efficient: with local nobles/clergymen + universal education	Relatively inefficient, high illiteracy
State Supervision	None, autonomous system	Yes, but weak - lack of resources
Other supervision	Coop auditing associations - efficient external system - specific school – “re-auditing process”	In network - additional control by the apex technician team No specific school

³¹ We base this comparison on the FCs networks belonging to the CIF, one of the most important actors in the West African microfinance sector.