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ACTUAL AND HISTORICAL EXPERIENCES OF SUCCESSFUL JOINT-LIABILITY LENDING

ABSTRACT

The considerable growth of Microfinance Institutions (MFIs) in developing countries has fostered an extensive literature on the factors that explain the economic rationality of these institutions. Within this literature, several theories of joint-liability lending have been proposed that emphasise the informational and enforcement advantages of this form of credit over traditional credit. These advantages, which underlie the growth of MFIs such as the Grameen Bank, may explain the origin and spread of institutions such as Cooperative Credit Banks (CCBs) in Europe and Italy in the 19th century. Such institutions even at present contribute to solving situations of market failure.

Keywords: Microfinance Institution; Joint Liability; Credit Cooperative Banks

JEL Classification: G20; O12

RIASSUNTO

Esperienze attuali e storiche di successo nel prestito con responsabilità congiunta

La significativa crescita delle Istituzioni di Microfinanza nei paesi in via di sviluppo ha favorito un'ampia letteratura sui fattori che spiegano la razionalità economica di queste istituzioni. Nell'ambito di questa letteratura sono state proposte diverse teorie relative al prestito con responsabilità congiunta, le quali enfatizzano i vantaggi informativi e di enforcement di questa forma di credito rispetto al credito tradizionale. Questi vantaggi, che sono alla base della crescita delle Istituzioni di Microfinanza come la Grameen Bank, possono spiegare l'origine e la diffusione nell'Ottocento in Europa e in Italia di istituzioni come le Banche di Credito Cooperativo. Tali istituzioni anche al presente contribuiscono a risolvere situazioni di fallimento di mercato.

I. INTRODUCTION

Microfinance Institutions (MFIs) aim to provide affordable credit to poor borrowers. In recent decades, these institutions have continued to grow significantly. The origin of this expansion lies in the combination of low interest rates and the willingness to lend to people who do not have access to finance from the formal financial system, i.e. a large segment of the population in developing countries (Banerjee and Duflo, 2011).

In the absence of microcredit, most poor people would be forced to borrow from relatives or moneylenders. The latter charge particularly high interest rates or use forms of rationing (Robinson, 2001; Allen, 1990). Indeed, the use of rationing by moneylenders is particularly common and helps to explain the low default rates reported by these institutions (Chowdhury, 2005).

The inability of official financial systems to provide affordable credit to poor people is considered one of the main causes of the cycle of poverty, and access to credit, as Nobel Prize winner Muhammad Yunus pointed out, is a chance for the poor to make use of the skills they already possess (Yunus, 2003)¹. Microcredit has emerged and developed over the past 25-30 years with the aim of promoting activity and income growth in developing countries through the provision of small scale and collateral-free loans to poor households (Servin *et al.*, 2012; Daley-Harris, 2006).

Most of the loans granted by MFIs are directed to women, since they have a higher recovery rate compared to men (Haque and Harbin, 2009; Osmani, 2007; Hossain and Knight, 2008).

The areas where MFIs are most frequently disbursed are rural areas, i.e. those of little interest to official finance. The country where microcredit has been most successful is Bangladesh, where Muhammad Yunus founded the Grameen Bank in 1976. This bank has over two million members spread over 35,000 villages, 94 percent of whom are women.

This bank initially has been subsidized and received grants. Over time it became able to operate even with resources from the market and to make profits (see Table 1).

¹ Access to microcredit, as well as access to education, healthcare, water, energy and transport, is an important tool that can help in alleviating poverty by boosting people's capacity to generate economic resources (Bourguignon, 2018; Botchuin, 2023),

TABLE 1 – *Grameen Bank Balance Sheet Items*

Year	Return on Assets	Return on Equity
2017	2.3	13.3
2018	5.1	22.3
2019	5.0	16.3
2020	3.6	12.0
2021	0.9	4.0
2022	3.2	9.0

Source: Credit Access Grameen (2023).

The success of the Grameen Bank has favoured its replication in over forty countries, mainly in Asia (e.g. the Bank Rakyat in Indonesia) and Latin America (e.g. the BancoSol in Bolivia). These institutions generally make profits, and this depends to a large extent on the high level of loan recovery rate that characterises them.

The global microfinance market size has been estimated at USD 184.86 billion in 2022 and 202.27 billion in 2023 and is continuously growing.

The success of MFIs has prompted several economists to study the reasons for this success. These studies have made it clear that the ways in which these institutions provide credit were already present in forms of cooperative credit that developed in Europe in the 19th century: the CCBs. These banks also survived the development of markets and official finance in Italy.

The article is organized as follows: in Section 2 a review of the theoretical explanations for the success of MFIs is provided; Section 3 contains an overview of the development of Credit Cooperative Banks in Italy; and Section 4 concludes.

2. THEORETICAL EXPLANATION FOR THE SUCCESS OF MFIS

The reasons why MFIs provide access to credit for categories of borrowers who would otherwise not obtain financing from the official system have been the subject of numerous theoretical explanations (see the survey by Morduch, 1999). These explanations mainly concern three characteristics of loans provided by MFIs, namely: the joint liability, the small instalment

payments, and the dynamic incentive.

2.1 The Joint Liability

A distinctive feature of many MFIs, such as Grameen Bank, is group lending. Borrowers are formed by groups whose members are jointly liable for one another's loans. If one member of the group does not repay the debt, the whole group is held liable for it and faces penalties for its colleague's behaviour.

In developing countries poor borrowers are unable to give collateral to secure their loans and lenders have no legal means to enforce payment. In such a context, group lending alleviates the four main problems encountered by formal credit institutions lending to poor borrowers who cannot offer collaterals, namely: recognising to which type of risk the possible borrower belongs, i.e. adverse selection; ensuring that the loan will be used in the correct way so that it can be repaid, i.e. moral hazard; knowing exactly the terms of the project when the borrower declares his inability to repay the debt, i.e. cost of state verification (auditing costs); and finding methods to force the borrower to pay the debt when he proves hostile in doing so, i.e. enforcement (Ghatak and Guinnane, 1999).

As acknowledged by, among others, Ghatak and Guinnane (1999), joint-liability lending institutions (JLLIs) can operate better than traditional banks if they are embedded in certain social contexts for two different reasons. First, the members of a community know each other and certainly have more information about each other than an external institution, such as a bank may be. Secondly, another market failure is that a bank cannot enforce financial penalties against poor people who do not repay their loans, because they are, by definition, poor and could not pay the penalty. The role of the community is precisely to impose non-financial sanctions that are, however, effective.

In what follows, the four problems above mentioned are analysed, highlighting how the different authors have demonstrated the role of joint-liability contracts².

² It should be noted that for all formal proofs, the reader must refer to the models proposed by authors in their original manuscript.

Minimizing the Effect of Adverse Selection

The problem of adverse selection arises when, due to information asymmetries, the lender does not know the borrower and, therefore, is not in a position to know in advance with what probability he will repay the loan.

As pointed out by Ghatak and Guinnane (1999), in principle *good risks* can be separated from *bad risks* if it is possible to ask the borrower to offer a guarantee: indeed, risky borrowers usually fail to repay the loan much more often and thus most often lose what they had provided as collateral. In this context, the bank could offer two different types of contracts, one with high interest rates but low collateral and the other with the opposite characteristics: risky borrowers will opt for the first type while others for the second. But such a mechanism cannot be exploited when it comes to lending to poor people, as they lack assets that could be used as collateral and therefore, the role of group lending is precisely to exploit local information networks to achieve the goal that would be achieved if the mechanism described above could be applied.

A number of scholars (see in particular, among others, Ghatak, 1999; and Van Tassel, 1999) have explained analytically how this mechanism operates: debtors know each other and, in particular, know those characteristics that are relevant for assessing creditworthiness, but the bank does not know those characteristics. In particular, the model proposed by Ghatak, 1999 clearly shows that group lending contracts can lead to price discrimination that is impossible with individual contracts.

As illustrated by Morduch (1999), this can be explained by considering two types of borrowers, safe and risky, knowing that the latter type fails more often than the former ($p_r < p_s$) but when he succeeds he obtains higher returns³. Investors have perfect information about each other, while the bank, although knowing the percentage of both types in the population, cannot determine whether a specific investor is of one type rather than another. If the bank does not know the type of borrower and if it operates in a context where collaterals cannot be used, then the bank must offer all borrowers a loan with the same nominal interest, r , such that $r\bar{p} = \partial$ (where \bar{p} is equal to the average probability of success of the population and ∂ is capital cost). As a result, safe investors have lower expected returns than risky types ($\bar{R} - rp_s < \bar{R} - rp_r$). Safe borrowers only invest if

³ In the model the author assumed for simplicity that the expected net returns are the same for both safe and risky borrowers: $p_r R_r = p_s R_s \equiv \bar{R}$, and it is assumed that investors are risk neutral.

the expected value of net returns exceeds the gain from wage labour, m , i.e. $\bar{R} - rp_s > m$, and risky borrowers do the same. But if the condition is not met for the safe borrowers, then only the risky borrowers might remain in the market and the equilibrium interest rate would rise⁴. The outcome of the model is then an inefficient solution that can be improved through a group lending scheme. Indeed, if we assume voluntary groups of two individuals and if we assume that the two individuals invest independently, but that the contract is written in such a way as to create what is called joint-liability, we can arrive at an efficient solution. The assumption is that each debtor pays nothing if his project fails and pays an amount, \dot{r} , if the project succeeds, but the successful debtor must pay an amount, α , if the other group member fails. With this assumption, it is possible to understand whether or not groups will be homogeneous, as the safe borrower will demand a certain amount from the risky borrower to create a group together, but the risky borrower will not be willing to pay it. Consequently, risky borrowers will tend to create groups with other risky borrowers, and the same applies to safe borrowers⁵. The latter have an expected return of $\bar{R} - p_s(\dot{r} + (1 - p_s)\alpha)$, while the former receive an expected return of $\bar{R} - p_r(\dot{r} + (1 - p_r)\alpha)$. Therefore, if \dot{r} and α are set correctly, group lending, according to this model, can be an effective way of price discrimination.

Minimizing Moral Hazard

After obtaining a loan, the success of a project depends on the actions of the borrower: ideally, these actions should balance marginal benefits and marginal costs, but this balance is not always achieved due to asymmetric information (Ghatak and Guinnane, 1999). In the absence of collateral, lenders and borrowers have divergent objectives, since the borrower does not bear the full cost of project failure; and lenders cannot precisely dictate the management of the project, not least because the borrower's actions are not easily observable without cost (Ghatak and Guinnane, 1999). Various authors have analysed moral hazard in the context of joint-liability lending (see, among others, Stiglitz, 1990; Varian, 1999; Banerjee *et al.*, 1994; Ghatak and Guinnane, 1999), considering various aspects of the theory of peer-monitoring in joint-liability contracts.

Following Morduch (1999) and extending his model presented in the previous section it can be

⁴ In this case, the interest rate should be set in such a way that $rp_r = \partial$.

⁵ For a formal explanation of this please refer to Morduch (1999).

seen how group lending can also yield advantages by encouraging borrowers to avoid risks that could jeopardize the bank's profitability. First, it is necessary to consider that an investor can invest in a risky or safe business. The expected utility can be defined as: $p_s u(R_s - r)$, or, alternatively, $p_r u(R_r - r)$, where subscripts indicate the two different types of activity: safe, s , or risky, r . Recalling the way the bank chooses the interest rate, if all businesses were safe then we would have $rp_s = \partial$, while the expected utility by engaging in risky activities would be $U_1 = p_r u\left(R_r - \frac{\partial}{p_s}\right)$, resulting in the bank losing money. Then, the bank will raise the interest rate to $r = \frac{\partial}{p_r}$, this obviously to the disadvantage of the borrower whose expected utility decreases to $U_2 = p_r u\left(R_r - \frac{\partial}{p_r}\right)$. Should there be an opportunity to commit to a safe activity, the borrower could improve his position by obtaining: $U_3 = p_s u\left(R_s - \frac{\partial}{p_s}\right)$ which is a less advantageous solution than the first case, i.e. U_1 , although more advantageous than the last, i.e. U_2 . Nevertheless, due to information asymmetries and the inability to commit to a safe activity, the debtor always gets U_2 . The turning point is that the incentive to undertake safe activity can be derived from the group loan contract. Indeed, considering the joint-liability payment introduced in the previous paragraph, it is possible to rewrite expected utility in such a way as to show that if α is set at a sufficiently high level, then, debtors will always choose for safe activity (Stiglitz, 1990):

$$p_s^2 u(R_s - \dot{r}) + p_s(1 - p_s)u(R_s - \dot{r} - \alpha) \geq p_r^2 u(R_r - \dot{r}) + p_r(1 - p_r)u(R_r - \dot{r} - \alpha).$$

As in the case of adverse selection, the social responsibility inherent in the group contract makes it possible to minimise another of the main problems encountered by formal credit institutions lending to poor borrowers who cannot offer collaterals, i.e. moral hazard.

Monitoring Costs

Another crucial aspect is verification costs, associated with the challenge of confirming the accuracy of a debtor's claim of inability to repay a loan. As highlighted by Ghatak and Guinnane (1999), considering the limited wealth of the borrower, if the project fails, the bank faces a reduced return, potentially falling below the break-even point due to a lower interest rate. The authors emphasize that any alternative option introduces state-contingent contracts, risking incentives for false reporting. The optimal solution, according to the authors, involves the bank charging a fixed interest rate and monitoring the borrower's ability to pay only if declared unable. However,

the authors acknowledge that high verification costs may hinder the availability of contracts allowing the bank to break even on loans. Once again, joint liability lending is proposed as a means to enhance efficiency by reducing verification costs. The underlying idea is that group members incur lower costs to verify each other's output, enabling the bank to avoid individual audits whenever a borrower claims low output by inducing the borrower's partner to accept responsibility for the borrower's claims. In the authors' model, the outside lender has to pay a certain amount, $\delta > 0$, to make sure that each project will pay off, and there are three quantities that characterizes each financial agreement: the amount of money an investor will give to the bank when the project is successful, the probability of an audit, both when the output is high, Y_h , and low⁶. The ideal contract seeks to maximise the expression $p(Y^h - r) - m$, where m represents the opportunity cost of labor and r is the interest rate⁷. This is subject to two constraints: (i) the "truth-telling" constraint, which requires the debtor to repay the debt when the output is high instead of falsely declaring it as low to avoid control; (ii) the bank must achieve a break-even point. Ultimately, the authors demonstrate that a contract can be considered optimal if the expected net return is at least equal to the opportunity cost of labor⁸.

Assuming joint-liability, two truthfulness constraints emerge: the first is the same as in the case of the individual contract, while the second states that if one member's project achieves a high output and his partner's a low output, then he will have an incentive to report the truth about the situation and will repay his debt as well as cope with the shared responsibility he has towards his partner (this second constraint is the binding one). Solving the truth-telling and zero-profit constraints, the authors show that in this scenario, audits are less frequent, leading to a reduction in expected audit costs and consequently, a lower interest rate⁹.

⁶ In the set-up proposed by the authors for simplicity, low output, Y^L , is normalized to 0.

⁷ Interest rate in the model refers to the "gross interest rate": the total amount a borrower must repay to the bank.

⁸ Furthermore, it is worth noting that an important condition is that: $pY^h - (1 - p)\delta \geq \partial$, i.e. the expected return from the project, minus expected cost of auditing, at least covers the cost of capital.

⁹ Please refer to Ghatak and Guinnane (1999) for formal proofs.

Employing Social Sanctions to Enforce Loan Commitments

As pointed out by Ghatak and Guinnane (1999), the last problem concerns the enforcement of corrective actions, which stems from the limited ability of creditors to enforce sanctions against defaulting borrowers. Even if the debtor's activity is successful and he is thus able to repay the loan, this may not be the case if the legal system is ineffective, and the debtor's indigence hinders the effectiveness of sanctions. Joint liability contracts can also mitigate this problem, as shown in Besley and Coate (1995), where the authors focus on how peer pressure can boost the willingness of borrowers to repay.

Ghatak and Guinnane (1999) starting from the "repayment game" analysed and proposed by Besley and Coate (1995), propose a simpler model, which is summarised below¹⁰. The starting point is that the only kind of penalty the creditor can impose is to stop lending in the future, so the debtor who has obtained an output $Y \geq r$, repays the debt if the gain he would have by not repaying the loan, the interest cost, is less than the net benefit he derives from continuing to have access to credit (B). For a given interest rate, there exists a critic value, $Y(r)$, such that the borrower repays the debt if $Y \geq Y(r)$. Assuming two borrowers, the bank must be repaid the amount $2r$. If this amount is not repaid, then both borrowers are considered to be in default, and neither can obtain the loan in the future. The authors highlight two possible cases. In the first case, one of the two members cannot or will not repay the debt, $Y \leq Y(r)$, while the other wants to repay it, assuming the burden of repaying that of the other member as well: $Y \geq Y(2r)$. In the second case, this second member wants to repay its debt but not that of the other borrower, $Y(r) < Y < Y(2r)$. It is clear that in the first case joint liability brings a better benefit than individual lending, but this is not true in the second case: the benefit brought by joint liability depends on which of these two scenarios is more likely to occur. A central aspect, however, is that of social sanctions, i.e. it is necessary to consider what happens when individuals are punished for causing losses to their lending partner. Besley and Coate (1995) show that social sanctions can be used to improve group lending performance: if the social consequences are significant enough, group lending will lead to a higher repayment rate than individual lending.

¹⁰ In the model, debtors are risk averse. Moreover, recall that when we refer to r we refer to the gross interest rate.

2.2 Small Instalment Payments

The second characteristic of loans provided by MFIs is that related to the way the debt is repaid. As pointed out by Morduch (1999), in conventional loan agreements, individuals receive the loan amount, invest it, and settle the debt at the conclusion of the loan period. Conversely, a noteworthy feature in many microfinance credit contracts is the method of repaying the loan through small, weekly instalments.

The practice of organizing the repayment structure in weekly instalments serves the purpose of early identification of potential defaulters. This enables fellow group members to apply pressure on those encountering difficulties and motivate them to honor their commitments. While this approach effectively reduces instances of insolvency, it presupposes that the repayment process takes place before the investment generates returns. Consequently, borrowers are mandated to possess an autonomous source of income to adhere to the weekly repayment schedule. This requirement becomes a constraint in implementing microfinance in extremely impoverished environments characterized by occupations that are highly seasonal, such as rainfed agriculture. In such regions, strict adherence to a weekly repayment schedule may impede the widespread adoption of microfinance.

2.3 Dynamic Incentives

Finally, the third important characteristic is related to dynamic incentives, indeed in MFIs the incentive for groups of borrowers to repay the debt is maximized through the following mechanisms:

- a. loans are disbursed sequentially to group members. Initially, only some of them receive loans. Only if their repayment performance is satisfactory, do the other members become eligible for loans;
- b. if a group member fails to repay the debt, other members will not receive loans in the future;
- c. incentives are further strengthened if borrowers can expect an increasing flow of loans (see Hulme and Mosley, 1996). Progressive lending allows the creditor to assess borrowers with small loans at the beginning, establishing a systematic approach to increasing loan amounts over time.

These mechanisms collectively create a system where the success of individual borrowers is intertwined with the collective success of the group. The sequential disbursal of loans and the consequence of one member's default affecting others create a strong incentive for responsible borrowing and timely repayment. Furthermore, the progressive lending approach not only provides borrowers with opportunities for financial growth but also enables the lender to manage risk effectively by starting with smaller amounts and increasing them according to demonstrated creditworthiness.

3. CREDIT COOPERATIVES IN ITALY: A HISTORICAL CASE OF JOINTLY-LIABLE CREDIT

Credit cooperatives made their debut in Germany in the 1850s, and their cooperative model gained popularity throughout Europe during the 19th century. Italy saw the emergence of two distinct types of cooperative banks: the popular banks, influenced by the Schultze-Delitzsch model¹¹, and the rural credit cooperatives, inspired by the Raiffeisen model¹². Notably, both of these institutional types adhere to the principle of one-member-one-vote for voting rights, rather than being based on the quantity of shares owned.

Nevertheless, there are several distinctions between popular banks and credit cooperative banks (CCBs)¹³. First, members of popular banks expect to receive dividends comparable to those distributed by commercial banks. In contrast, CCBs impose stringent limits on dividend allocation, as 70 percent of profits must be earmarked for reserves. Secondly, unlike popular banks, CCBs are obligated to primarily direct their lending activities towards their members, underscoring the mutualistic and solidaristic purpose of CCBs. Thirdly, due to their operation in relatively confined areas, CCBs members, particularly in the context of rural CCBs, engage in frequent interactions, thereby possessing crucial information about the reliability of each member.

Italian CCBs represent an interesting case because in several respects they remain linked to their origins more than cooperative banks in other European countries. The first Italian CCB was

¹¹ The distinguishing features of the Schultze-Delitzsch popular banks were that they provided short-term loans, managed according to traditional banking principles, accumulated capital by forcing members to acquire large capital shares, operated over large areas of territory and paid dividends on shares. See Zerche (2001).

¹² The Raiffeisen were ethically motivated, based on the principle of social solidarity. They therefore did not pay dividends. The operational area of these banks was small, often as large as the local parish. See Schiffgen (1979) and Kalmi (2012).

¹³ On this aspect see, among others, Poli (2019).

founded in 1883 in Loreggia by a landowner, Leon Wollemborg. His aim was to contrast usury and to grant loans to farmers while adhering to cooperative mutualism and solidarity.

Subsequently, since 1886, a number of other rural CCBs were established in Lombardy. The process of establishing these banks accelerated after the issuing of the encyclical *Rerum Novarum* by Pope Leo XIII. In this encyclical, the pope urged Catholics to take solidaristic initiatives to stimulate the economic and social inclusion of the rural classes and the proletariat. Between the end of the 19th century and the first decades of the 20th century, the number of Italian CCBs increased significantly. In 2022 their number amounted to 3540. This number decreased significantly during the Fascist regime but increased again in the years following the Second World War, even in the presence of a severe reduction in the incidence of agriculture on the national GDP. In 2022, their number was 226. They had 4097 bank counters out of the 20985 of all Italian banks. Table 2 shows that even today, in a context of developed markets, CCBs, relying on joint-liability lending, can still offer access to credit to individuals who would face difficulties in the formal system.

TABLE 2 – *Number of Banks and Bank Counters in Italy (2022)*

	Number of banks			Bank counters
	Included in banking groups	Not included in banking groups	Total	
Banks Ltd	79	36	115	16109
Popular Banks	7	11	18	655
CCBs	187	39	226	4097
Branches of foreign banks	1	78	79	124
Total	274	164	438	20985

Source: Banca d'Italia (2023).

CCBs have several characteristics similar to MFIs and in particular to Grameen Bank¹⁴.

A first similarity lies in the fact that CCBs, like the Grameen Bank, are based on a joint-liability framework. In the case of the Grameen Bank, if one member of the group does not repay the credit received, all other members are cut off from future credit from the lender. In the case of CCBs, the non-repayment of debt by one member negatively affects the long-term growth of the bank and,

¹⁴ See Catturani *et al.* (2016).

thus, the ability to access credit from all other members.

Another similarity between Grameen Bank and CCBs is that they both operate in small local areas, where individuals are familiar with each other and have a high level of awareness about each other's creditworthiness. A third similarity is that both Grameen Bank borrower groups and CCBs members are self-selected groups.

Of course, there are differences between CCBs and Grameen Bank. The most notable distinction is that the borrowers groups at Grameen Bank only exist for the duration of a loan, whereas CCBs membership is anchored to the bank's existence and is independent of each loan.

Like Grameen Bank and numerous MFIs, the CCBs:

- i. promote the financial inclusion of groups that would otherwise be discriminated against in the banking and financial markets;
- ii. achieve financial inclusion of these groups by utilizing the relational ties between their members;
- iii. their growth is associated with the degree of social capital possessed by members (see Banerjee *et al.*, 1994; Ghatak and Guinnane, 1999; Angelini *et al.*, 1998);
- iv. moreover, they are profit-oriented and not subsidized.

Point IV is highlighted in Table 3. The Table illustrates that not only CCBs are not subsidised but they are also profitable. CCBs have a higher capitalisation ratio in comparison to the system, thereby enabling them to bear higher levels of risk in lending and to better navigate macroeconomic crises compared to other types of banks¹⁵.

TABLE 3 – *Financial Indicators (% values; year 2022)*

	Cost-income ratio	ROE	Capital Adequacy Ratio
CCBs	63.8	6.3	23.1
Total System	63.1	9.0	19.1

Source: Banca d'Italia (2023).

¹⁵ See Birchall (2013), Ferri *et al.* (2014; 2015).

4. CONCLUSIONS

Over the past few decades in the microfinance industry, institutions have transformed from subsidised to profitable enterprises. The literature presents various joint-liability lending theories that highlight the informational and enforcement advantages of this financing method. These benefits account for the reason why most MFIs have become profitable over time. These same advantages explain why, since the second half of the 19th century, CCBs have emerged and proliferated in Europe and Italy. While generating profits, they also provide access to credit on less burdensome terms compared to the official system.

REFERENCES

- Allen, F. (1990), "The Market for Information and the Origin of Financial Intermediation", *Journal of Financial Intermediation*, 1(1), 3-30.
- Angelini, P., R. Di Salvo and G. Ferri (1998), "Availability and Cost of Credit for Small Businesses: Customer Relationships and Credit Cooperatives", *Journal of Banking and Finance*, 22(6-8), 925-954.
- Banca d'Italia (2023), Relazione annuale sul 2022, Banca d'Italia: Roma.
- Banerjee, A.V. (2013), "Microcredit under the Microscope: What Have we Learned in the Past Two Decades, and What do we Need to Know?", *Annual Review of Economics*, 5(1), 487-519.
- Banerjee, A.V., T. Besley and T.W. Guinnane (1994), "Thy Neighbor's Keeper: The Design of a Credit Cooperative with Theory and Test", *Quarterly Journal of Economics*, 109(2), 491-515.
- Banerjee, A.V. and E. Duflo (2011), *Poor Economics: A Radical Rethinking of the way to Fight Global Poverty*, Public Affairs: New York.
- Besley, T. and S. Coate (1995), "Group Lending, Repayment Incentives and Social Collateral", *Journal of Development Economics*, 46(1), 1-18.
- Birchall, J. (2013), *Finance in an Age of Austerity: The Power of Customer-Owned Banks*, Edward Elgar: Cheltenham.
- Botchuin, W.C. (2023), "Inclusive Growth Analysis: Evidence from Côte d'Ivoire", *Economia Internazionale/International Economics*, 76(1), 91-134.
- Bourguignon, F. (2018), "Spreading the Wealth", *Finance and Development*, 55(1), 22-24.
- Catturani, I., P. Kalmi and M.L. Stefani (2016), "Social Capital and Credit Cooperative Banks", *Economic Notes*, 45(2), 205-234.
- Chowdhury, P.R. (2005), "Group-Lending: Sequential Financing, Lender Monitoring and Joint Liability", *Journal of Development Economics*, 77(2), 415-439.
- Credit Access Grameen (2023), Foreign Path towards a Stronger Feature. Integrated Annual Report 2022-2023, available at: <https://www.creditaccessgrameen.in/wp-content/uploads/2023/08/CreditAccess-Grameen_Annual-Report_FY-2022-23.pdf>.
- Daley-Harris, C. (2006), *State of the Microcredit Summit Campaign Report 2006*, Microcredit Summit Campaign: Washington, DC.
- Ferri, G., P. Kalmi and E. Kerola (2014), "Organizational Structure and Exposure to Crisis among

- European Banks: Evidence from Rating Changes”, *Journal of Entrepreneurial and Organizational Diversity*, 3(1), 35-55.
- Ferri, G., P. Kalmi and E. Kerola (2015), *Organizational Structure and Performance in European Banks: A Reassessment*, in: A. Bryson (Ed.), “Advances in the Economic Analysis of Participatory and Labor -Managed Firms”, Emerald Group Publishing, Ltd.: Bingley.
- Ghatak, M. (1999), “Group Lending, Local Information and Peer Selection”, *Journal of Development Economics*, 60(1), 27-50.
- Ghatak, M. and T.W. Guinnane (1999), “The Economics of Lending with Joint Liability: Theory and Practice”, *Journal of Development Economics*, 60(1), 195-228.
- Haque, M.A. and J.L. Harbin (2009), “Micro Credit: A Different Approach to Traditional Banking: Empowering the Poor”, *Academy of Banking Studies Journal*, 8(1-2), 1-13.
- Hossain, F. and T. Knight (2008), “Financing the Poor: Can Microcredit Make a Difference? Empirical Observations from Bangladesh”, Brooks World Poverty Institute Working Paper No. 38.
- Hulme, D. and P. Mosley (1996), *Finance against Poverty*, Routledge: London.
- Kalmi, P. (2012), *Cooperative Banking*, in: J. Toporowski, J. Michell (Eds), “Handbook of Critical Issues in Finance”, Edward Elgar: Cheltenham.
- Morduch, J. (1999), “The Microfinance Promise”, *Journal of Economic Literature*, 37(4), 1569-1614.
- Osmani, L.N.K. (2007), “A Breakthrough in Women’s Bargaining Power: The Impact of Microcredit”, *Journal of International Development*, 19(5), 695-716.
- Poli, F. (2019), *Co-Operative Banking Network in Europe: Models and Performance*, Palgrave Macmillan: London.
- Robinson, M.S. (2001), *The Microfinance Revolution: Sustainable Finance for the Poor*, World Bank: Washington, DC.
- Schiffgen, W. (1979), “The Raiffeisen Movement from Agricultural Cooperation in West Germany”, *Agricultural Administration*, 6(4), 245-251.
- Servin, R., R. Lensink and M. van der Berg (2012), “Ownership and Technical Efficiency of Microfinance Institutions: Empirical Evidence from Latin America”, *Journal of Banking & Finance*, 36(7), 2136-2144.
- Stiglitz, J.E. (1990), “Peer Monitoring and Credit Markets”, *World Bank Economic Review*, 4(3),

351-366.

- Varian, H.R. (1990), "Monitoring Agents with other Agents", *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, 146(1), 153-174.
- Van Tassel, E. (1999), "Group Lending under Asymmetric Information", *Journal of Development Economics*, 60(1), 3-25.
- Yunus, M.J.A. (2003), *Banker to the Poor: Micro-Lending and the Battle against World Poverty*, Public Affairs: New York.
- Zerche, I. (2001), Die sozialpolitischen Ansätze im Leben und Werk von Hermann Schulze-Delitzsch: Darstellung und kritische Würdigung, Heft 5, Vorstand und Kuratorium des Fördervereins Hermann Schulze-Delitzsch und Gedänkstätte des deutschen Genossenschaftswesens e.V., Delitzsch.

