
TRANS-BORDER EXPANSION IN THE QUICK LOANS SECTOR (PROBLEMS AND SOLUTIONS)

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Abstract: The enterprises operating in the “quick loans” sector are microfinance institutions. Since they are not banking institutions, they need to adhere to more rigid financial management rules both in terms of fund raising and lending, especially regarding the so called “quick loans” category. The “quick loans” sector is defined as economic activity that, under the terms of the regulatory framework in force, allows a non-banking financial institution to provide unsecured (short-term) loans based on borrower’s income and credit profile and to charge high interest rates and added fees to offset the associated risk. The results of the survey confirm that this sector is a specific segment of the financial services sector that complies with the national regulations and creates a market for financial services that are essentially equivalent to the unsecured short-term bank loans but have profitability and return characteristics that make them competitive to the services offered by commercial banks. The successful of the financial management of these companies is based on their scoring models for assessing the risk of borrower’s default.

Keywords: quick loans, scoring models, risk of default.

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Introduction

In the historical development of the financial system, lending is the principal means of monetary transfer of value. The interest on a loan is perceived both as the “price” a borrower has to pay for the right to use the lender’s financial resource for an agreed period of time, and as the reward the lender is

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entitled to for being unable to enjoy the liquidity of his savings during this period. Historically, the transformation of lending from a favour between separate households into a service provided by enterprises (banks and non-banking institutions) resulted in the creation of the crediting sector. The “quick loans” sector is defined as a specific and rapidly developing sector of financial services with characteristics and effects which often go beyond the regulatory frameworks in force. These characteristics are the **focus** of a study on this sector in Bulgaria and Romania as neighbouring countries which accessed the EU in 2007 and in which the “quick loans” sector is characterized with high growth and market positioning levels. **Therefore, the object of the research** is the “quick loans” sector and its **subject** are the challenges faced by the financial management of the operations department of a branch of a Bulgarian non-banking financial institution for “quick loans” (NBFIQL) in Romania.

I. Theoretical research in the field of microfinance institutions

The enterprises operating in the “quick loans” sector are known as microfinance institutions (MFI). Since they are not banking institutions, they need to adhere to more rigid financial management rules both in terms of fund raising and lending, especially regarding the so-called “quick loans” category. The “quick loans” sector is defined as economic activity that, under the terms of the regulatory framework in force, allows a non-banking financial institution to provide unsecured (short-term) loans based on borrower’s income and credit profile and to charge high interest rates and added fees to offset the associated risk.

In their research paper, (Saeed, Javed, & Noreen, 2018) investigate the relationship between microfinance institutions governance and performance in South Asia before and after the financial crisis of 2007. According to (Koubâa, 2014), the level of human capital development (in terms of education competences) is one of the key factors for access of the financially constrained entrepreneurs. (Khan & Ashta, 2013) believe that microfinance faces more than just credit risk, but also risk related to liquidity, market conditions, transactions, fraud, management, and reputation. The most successful microfinance institutions manage all these risks by assessing borrowers’ repayment capacity, information systems, and social insurance. In this respect, (Nedunchezian & Sivasankaran, 2009) studied the need for assessing the performance of stakeholders of microfinance programs. Based on his research, (Gurses, 2009) reaches the conclusion that there is a relation between the level of development of the financial institutions (including the microcredit businesses) and the level of poverty in a given country. Microcredit markets and institutions have

experienced a certain number of major crises over the last decades. Understanding the characteristics of those crises and their causes is of primary importance. An article published by (Guérin, Labie, & Morvant-Roux, 2018) attempts to define the dynamics that have led to those crises by analysing a set of factors at three levels: customers, institutions, and markets. The result of a research conducted by (Ssekiziyivu, Mwesigwa, Joseph, Nkote Nabeta, & Oyemomi, 2017) indicated that credit allocation and risk management had a significant relationship with loan portfolio performance of MFIs. A survey conducted by (de Oliveira Leite, 2017) reviews the evidences from several microfinance studies. The results provided evidence that microfinance can help the poor to become entrepreneurs, grow their business and save more. (Chopra, 2017) studied the microfinance sector in India to find out that most of the clients of MFIs are y daily wage earners, marginal farmers, and women working from home. A research conducted by (Riggins & Weber, 2017) provided empirical evidence that identification biases result in inefficient microcrediting decisions. Prior empirical research in the field of microfinance indicate that there is the potential for identification bias whereby lenders may be motivated to give to specific projects with which they have an affinity without regard to whether it represents a sound financial investment.

A study conducted by (Yimga, 2016) addresses the important question of how microfinance institutions are affected in the process by using panel data estimations to empirically investigate the causal effect of microfinance growth on microfinance institution loan portfolio quality. In their article (Lopatta & Tchikov, 2016) use multivariate regressions of economic development variables such as per capita gross national income, GDP growth, as well as gross capital formation against specific microfinance institutions' variables to show that the success and performance of MFIs significantly influence economic development through the value that MFI performance adds to purchasing power. An article by (Sainz, Torre, López, & Sanfilippo, 2015) empirically analyses the reasons for crises in microfinance institutions in the period 2003–2011. There is no doubt that MFIs had a significant influence in terms of financial integration. In their paper, (Bhaskar & Subramanian, 2011) discuss an adaptive loan recommender system that assists the MFIs in making a more informed decision and help them grow with minimum resources. Recently, an innovative approach has gained popularity – the so-called *relationship-based financing*. This approach and its potential efficiency was analysed by (Pollinger, Outhwaite, & Cordero-Guzmán, 2007). The results of the analysis show that credit is generally being offered at interest rates that do not correspond to the risk levels of borrowers.

The article of (Tchakoute Tchuigoua, 2018) is an attempt to answer the question which characteristics of microfinance institutions affect the choice of

a decentralized loan approval process. The second concern of the author is whether the choice of allocating the loan approval decision to the loan officer enables a microfinance institution to expand its number of loans and improve its loan portfolio quality. The author concludes that a decentralized loan approval process improves MFIs' breadth of outreach (the number of active borrowers) but does not affect the size of the loan portfolio and does not deteriorate their loan portfolio quality.

Many publications discuss the problems faced by MFIs in terms of the available sources of financing. Most of these problems are associated with the fact that they do not have a fund-raising function (they are not permitted to collect deposits) and do not have access to debt capital (stock and/or bonds traded on the capital market (Zahariev, 2012). An article by (Dorfleitner, Röhe, & Renier, 2017) examines the advantages of an alternative funding scheme which provides access of MFIs to debt capital from *microfinance investment vehicles* (MIVs). The results of the analysis show that the key predictors for success of this funding scheme are the maturity and the financial performance of MFIs. Other factors that affect the efficiency of this scheme are the size and the D/A ratio of the MFI for the previous year. MIV funding is associated with the requirement that MFIs should eliminate the possibility for borrowers' default rather than achieve high microcredit profitability.

The potential sources of MFI funding are analyzed in detail in the article of (Al-Azzam & Mimouni, 2017). The main conclusion in the article is that the use of foreign currency debt, on average, leads to higher microcredit interest rates. The authors empirically prove that MFIs operating in countries with pegged exchange rate regimes and profit MFIs are better able to mitigate foreign currency risk. Moreover, the authors suggest that local currency debt is a better option for MFIs if the goal is to provide microcredit at lower interest rates.

The above studies prove the importance of MFIs and their microcredit services as a source of "quick loans" for the rapidly increasing demand for personal financing.

In their study, (Khachatryan, Hartarska, & Grigoryan, 2017) investigate the joint impact of seven categories of capital on three dimensions of performance, using a seemingly unrelated regressions (SUR) method and panel data from MFIs in Eastern Europe and Central Asia during the period 2005–2009. The results suggest that performance is influenced by the preferences of the stakeholders who provide the capital. A study conducted by (Nersisyan & Dantas, 2017) uses the concept of the hierarchy of money to analyze the process of liquidity creation in modern capitalist economies where shadow banks play an active role. The authors abandon the narrow focus on banks as the creators of money as well as the idea that nonbank financial institutions (NBFIs) are

mere intermediaries between savers and borrowers. According to (Popescu, Simionescu, Cărăba Meiță, & Popa, 2016), the credit risk of non-banking financial institutions is lower with borrowers with high levels of education and income, i.e. with a high “*social status*” level. Their results are based on binary logistic regressions.

A paper by (Ghiță-Mitrescu, Duhnea, Antohi, & Moraru, 2016) investigates the importance of the non-bank financial institutions (NBFIs) in Romania. The findings of the research lead to the conclusion that, on one hand, the shadow banking system is poorly developed comparing to the traditional banking system and the NBFIs assets cumulated with the investments funds represent only 14% of the Romanian financial system, with a downward trend of the assets comparing with the banking system and a chaotic evolution of their profitability. On the other hand, the non-bank financial institutions proved that their lending activity brings benefits for the real economy because they offer funds to those sectors of activities poorly financed by the traditional banking system as trade, services, mining and manufacturing, and agriculture and may be of interest to encourage the development of this segment of the financial market.

A key aspect of the financial analysis of non-banking financial institutions is their profit margin. A research conducted by (Cuéllar-Fernández, Fuertes-Callén, Serrano-Cinca, & Gutiérrez-Nieto, 2016) aimed to determine the number and importance of margin determinants in microfinance. The research of (Leyshon, Signoretta, Knights, Alferoff, & Burton, 2006) aims to assess the role of doorstep credit companies in the delivery of financial services in areas affected by high levels of financial and social exclusion. In particular, the paper looks at the relationship between agents and customers using two metaphors associated with interaction between different species in an ecological setting - namely, *parasitism* and *symbiotic mutualism*. A study conducted in 2014 by (Pole, Asawa, & Shah, 2014) analyze the possibilities for financial engineering in funding MFIs through *securitization* deals as a viable option with priority sector lending norms remaining unchanged and direct lending to microfinance institutions seen as risky by banks. A paper by (Hollis & Sweetman, 1998) presents a historical review of the development and characteristics of MFIs. The authors reach the conclusion that depositor-based MFIs tend to last longer than IMFs financed by donations or government loans. There is a direct relation between the legal form of the MFIs and their performance. A research conducted by (Da Costa, 2017) investigates the relationship between the legal forms adopted by microfinance institutions and their performance within three scopes: financial performance, social performance, and efficiency in resource allocation. The results of the analysis show that larger MFIs have higher profits, higher returns, and higher

operational self-sufficiency rates than smaller MFIs, indicating that MFI growth could enable consolidation in the microfinance market. The results also indicate that for smaller MFIs the way to consolidate and improve the indicators could be through assimilating or merging with other MFIs. It was also noted that non-bank financial institutions and rural banks are able to serve more customers and that cooperatives provide smaller loans, causing a bigger social impact, and that they obtain higher returns and profits. The results indicate that these legal forms may be the most appropriate for the microfinance market.

II. An MFI business model

A decision to open a branch or establish a subsidiary in a foreign country initiates a technical process for selection of a suitable office location and staff members. Since the development and success of any MFI depend on selecting a team of qualified employees, the selection process may last for as long as 6 months. The selection of local residents who have the necessary qualification and certain experience in the sector is of paramount importance. Market penetration can be boosted if the company succeeds in recruiting people who have received relevant training or gained practical experience in rival companies. However, this poses the risk of copying certain bad practices. The company subject to our study selected the core team members and sent them for a one-month training in the head office of the parent company in Sofia, where they received specialized training according to their functions.

In Romania, the main condition for a non-banking financial institution to obtain a license is a minimum capital requirement of EUR 200 000 for consumer lending and EUR 3 million for mortgage-backed lending (Marinov, 2017). The most important specialists, who were trained first, were the Operations Officer and the IT Specialist, followed by the Call Centre Manager. When the training was completed, the staff started the tests of an ERP system developed especially for the subsidiary. Companies in the non-banking financial sector use different programs designed and maintained specifically for them. The selected program must be registered and licensed for use by the National Bank of Romania. This process lasts 20 business days. One of the most important structural units of an MFI is its call centre, because it combines several functions, such as advertising, customer checks and verification, crediting, staff control, etc.

The call centre was located in close proximity to the head office and operated under its direct supervision during the first few months. After this initial period, it operates as a completely independent unit and can be relocated to a more remote location. The call centre is the contact point with the

customers – it receives incoming calls from customers and submits the information about the client to the sales department. The sales representative or, in our case, a credit consultant visits the home of the customer to assess their creditworthiness by filling in a form with sufficient information about their employer, residential status, income, marital status and family members. The completed form is then submitted to the credit department, which is a structural unit of the call centre. The credit department verifies the submitted information (e.g. whether the ID provided is genuine or fake, whether the customer has a valid employment contract or pension income, whether the customers own the home they live in or are tenants, and last but not least, whether the potential borrower has other outstanding liabilities by checking in a credit register, if there is any.) At this stage the MFI faces several problems – despite the fact that it was registered as a personal data operator in Romania, non-bank financial institutions are not allowed to carry out detailed checks in the credit register of banks, a regulation which was revoked in 2014. Fake ID cards turned out an even greater problem due to the fact that the Romanian Ministry of Interior does not allow the validity or even presence of an identity document to be checked. Therefore, this verification is based solely on the information provided by the credit consultants and their objective assessment, which poses the risk of fraud and collusion between the consultant and the borrower or even a manager.

A regional office is headed by a Regional Manager, a Team Development Manager, who is responsible for the management and training of a team of up to 15 credit consultants, and a Teller, whose job is to pay the amounts agreed by the consultants and to receive the amounts repaid on a daily basis. The operation of all regional offices are supervised by the central corporate (internal) security unit. The members of this unit are responsible to ensure that all departments and managers (operations, crediting, and call centres) observe the established rules in the company.

The decision to launch the first regional office was taken on the grounds of a market survey and after a number of meetings, which resulted in a decision to avoid the risk of launching the first office in the highly competitive market in the capital, where the risk of attracting many customers prone to default in the first months would have meant a failure of the whole project. Another factor that influenced that decision was the fact that in a big city like Bucharest the cost of renting appropriate offices and recruiting qualified staff would have been significant. This is why the company decided to start with several offices in smaller towns with developed industry in order to resolve all concomitant problems and errors before entering the market in the capital and the major cities. The general objective was to penetrate the market and gradually cover the whole territory of the country, including the smaller settlements.

This launching strategy imposes several risks, such as:

- Less strict control from the central office – this problem was resolved at the cost of too many business trips;
- Lack of direct communication with the central office management.

Within four months, the training of the staff for the first regional (head) office was completed and the IT system for the call centre was commissioned. The Sales Manager and the Executive Director developed the advertising campaign to be launched in the location of the first regional office – the town of Pitesti. During the same period the managers, consultants, and teller were recruited for the regional office. The advertising campaign included direct mail of leaflets, branding of public transport vehicles, posters, billboards, and local broadcasts of radio and TV commercials.

Two days after the start of the advertising campaign, the first clients showed interest in our services. The main problem with such clients is that 90% of them are people with financial obligations to other financial institutions, who are very likely to default on their loans in the future. This is proved by statistical cluster analyses of different categories of loans grouped according to their maturity, size, repayment terms, etc.

The ratio of full-time to part-time employees is an important factor from the enterprises in the microfinance sector. About 80% of the workload is carried by the credit consultants and part-time loan brokers. However, in 2015 Romania enforced a ban on the part-time labour contracts, which resulted in significantly higher labour costs for the company. The leading MFIs started using self-employed brokers (sole proprietors) as credit consultants at a ratio of one full-time employee to three self-employed consultants. An analysis of the labour market shows that the job of a credit consultant is considered unattractive (i.e. auxiliary and low-qualified) and therefore the company had to use more freelance (self-employed) consultants for its operations. At the same time the number of consultants who do not consider it necessary to operate as self-employed persons or run their own companies is growing because the related costs cannot be reimbursed by the MFIs.

One manager manages up to 15 consultants, and within 2 years, the staff turnover rate reached 85%. Most team members are quickly demotivated by the high target levels set by the company and decide to quit because the level of their remuneration depends on the level of achievement of these targets (e.g. number of loan agreements signed, number of new clients and, last but not least, the rate of repayment of the loans extended by the consultant). These performance indicators are easy to manipulate and use in a fraudulent manner. For example, each new credit consultant is required to conclude 25 new loan agreements. Of course, the extension of existing agreements also counts, but the idea is that consultants should advertise and attract new clients to earn

additional income. According to the statistics, the call centre attracts between 10 and 25 new borrowers per month.

Each regional office on average covers an area with 30,000 to 150,000 residents, which means that very few clients would contact the consultants through the call centre although it is the principal contact point for new clients. This is why the consultants are encouraged to advertise the products and seek new clients. For some consultants this job is auxiliary (i.e. it is not their main occupation) and they are happy to have several loyal clients who would provide them with a minimum guaranteed income although they do not achieve the set targets. In contrast, new consultants have to achieve the targets in order to get paid and often resort to fraudulent methods, which most often include the use of fake IDs for the loan agreements they conclude.

Many of these fictitious loans are discovered within several months due to good communication with the manager. For example, a consultant submits a loan request from a non-existent client to a manager, and the latter transfers the information to the credit department for approval or rejection of the requested loan. All start-up companies try to minimize the number of rejections as this is considered bad publicity and, therefore, during the first three to four months, half of the approved loans are very risky and for the next 6 months the company is relatively tolerant towards past-due repayments. Thus, the consultant “borrows” the amount of BGN 500 with a weekly repayment schedule of BGN 55. He pays the first two repayment instalments according to the approved schedule and delays the third repayment for a couple of days telling the manager that “the client” faces some temporary difficulties and will not default on the rest of the payments. Then he makes the third and, possibly, the fourth scheduled repayment, after which the client disappears mysteriously. This is a typical example of a fictitious credit with a delay of the possibility of fraud being detected. During the period of delay, the same consultant may hand out dozens of fictitious loans due to lack of adequate or sufficient control by the credit department.

The internal security experts check selected clients using a default and risk profile algorithm. The algorithm is based on commonly accepted scoring models. A scoring model includes a statistical analysis of the client's profile and weighs various predefined variables to form a score, which forms the basis for approval or rejection of the requested loan. Depending on the company's policy, this model may be restrictive or liberal. Restrictive models provide scores that result in about 55% rejects of the requests. Scoring models are based on mathematical and statistical algorithms and data collected through basic, company-specific measurements. For example, the Romanian MFI Happy Credit uses a relatively simple model based on the following 10 basic questions the credit consultant is required to ask the potential borrower:

1. Do you have a permanent employment contract?
2. Do you own a car?
3. Do you own a home (house/flat)?
4. Did you complete any educational level?
5. Are you married?
6. Is your home fully furnished?
7. Do you have a guarantor?
8. Do you have children?
9. What is the size of your income?
10. Do you hold a bank account?

The consultant marks each of these questions as answered positively or negatively (Yes or No). If there are 5 or more positive answers, the requested loan is approved. This is the simplest and at the same time the most imperfect scoring model.

The scoring model of the Romanian Easy Credit company includes a large number of variables and databases organized by region, town, occupation and age group. Although the total number of these variables is over 50, none of them is sufficiently indicative or dependent on any other variable. In the occupation database the borrowers are classified into 10 general groups of occupations. Тук се срещат и първите трудности при чисто статистически анализ на групите хора, за да се предвиди по-голяма точност за предвидимостта на модела.

On the basis of a preliminary analysis, all groups are clustered and expressed as variables to be used in the analysis. When there are only a few observed parameters, but they do not differ significantly, groups of dummy variables were created to reduce the total number of variables. The clustering procedure identified the main groups which are significant for predicting the possibility for default. These variables were modified further during the analysis process.

More than 120 variables were available for the model. A default probability models must be based on the best combination of factor variables, including default ones. A dependent variable has two alternative values: default or non-default. The model is based on a statistical method known as *logarithmic regression* and can be expressed as:

$$PD = 1/(1+e^{-y}),$$

where:

PD is the probability for default during the whole repayment period;

$y = B_0 + B_1x_1 + B_2 x_2 + \dots + B_nx_n$ (y is the weighted value using the SUMPRODUCT function in MS Excel);

B_0 is constant;

$B_1 \dots B_n$ are factors (weights) that correspond to the importance of each variable used in the model and are determined using a statistical analysis of the clients of NBMFI.

$x_1 \dots x_n$ is the scoring base, which is individual for each client.

The statistical analysis determines the values of $B_0 \dots B_n$, which show the lowest deviation between the forecast PD value and the actual default rate from the database (using the least squares method). The actual statistical analysis uses on a large number of variable combinations to determine the variables and weights for the scoring model.

The table below shows the main statistical combinations of variables that were recommended. The first column shows the coefficients (values or weights) of the variables that match most closely the actual default scenarios (PD = 100%). The last column shows the statistical significance of these coefficients. The lowest their value is, the more significant these coefficients are.

The main criteria for selection of variables are:

1) The variable should be significantly different from zero. With a large number of observations, a high level of significance is required, for example 99%, meaning that there is a 99% probability that the coefficient or parameter is greater than. With fewer observations, the acceptable level of significance is 95%.

2) The overall model should result in a significant improvement of the variables in the credit consultant's questionnaire.

3) The coefficient values should seem logical based on our common sense and practical experience with other models.

Some of the variables in the table above do not meet the 95% significance criterion but are logical. Most of the variables are statistically significant. Generally, the "not applicable/available" (NA) records are eliminated by combining them with other variables with low weights (e.g. "occupation" and "labour contract".) Some less important variables, such as "credit history", "retirement status", "less than 6 months with current employer", and "tenant" should be kept because they logically reflect factors that affect the social status and the repayment capacity of the borrower.

Table 1

Variables used in the scoring model of an MFI

Regression table	Coef.	SE Coef.	Z	P
Constant	-7.87310	0.71260	-11.05	0.000
Office no. 1004	0.88730	0.27250	3.26	0.001
Office no. 1005	0.40090	0.18840	2.13	0.033
Office no. 1008	0.73320	0.34020	2.16	0.031
Office no. 1011	-1.65620	0.73090	-2.27	0.023
Root 3 of the loan size	0.60701	0.07571	8.02	0.000
Up to 12 weeks	-0.89930	0.19260	-4.67	0.000
Up to 16 weeks	-0.85080	0.26590	-3.20	0.001
Up to 32 weeks	0.36440	0.15430	2.36	0.018
No credit history	0.27570	0.19580	1.41	0.159
Good credit history (no defaults)	-1.70600	0.62500	-2.73	0.006
Zone 42	1.30320	0.32580	4.00	0.000
Under 40 years of age	0.44960	0.14880	3.02	0.003
Male	0.53960	0.13940	3.87	0.000
Married or de-facto married	-0.36790	0.13350	-2.76	0.006
Occupation: NA, 5 or 7	2.18330	0.20840	10.48	0.000
Labour contract: NA, 2 or 5	0.44330	0.14600	3.04	0.002
Retired	-0.53730	0.50750	-1.06	0.290
Less than 6 months with current employer	0.27540	0.18350	1.50	0.133
Square root of income	-0.04338	0.01332	-3.26	0.001
Total income over 1100	-0.44990	0.22710	-1.98	0.048
Tenant	0.12190	0.19340	0.63	0.529
Lives with parents	-0.38980	0.16650	-2.34	0.019
Owens a car	-0.60440	0.15600	-3.88	0.000
Bank account holder	-0.20050	0.13610	-1.47	0.141
Involved in legal proceedings	3.41400	1.29900	2.63	0.009

Source: Author's calculations with data from the database of a Romanian MFI

III. Recommendations and conclusions

Romania's legislators added two new requirements to the regulations applicable to non-bank financial institutions. According to these requirements, NBFIs must be registered in a special registry and are subject to "rational" supervision by the National Bank of Romania (Marinov, 2017):

- The disclosure of the volume of newly issued loans over a certain period, regardless of the fact that they are no longer reported in the balance sheet of the non-bank financial institution (i.e. they are already repaid or sold to collector firms), has an important informative value.

- Calculation of an indicator which shows the actual average cost incurred by the borrower (in addition to the effective annual interest rate). This indicator shows the cause-and-effect relation between price and risk and can infer an excessive risk exposure of the NBF.

Regardless of the regulations in force, the commonly applicable decision-making models for microfinance loan approval, some functions of MS Excel can be used to identify the following good practices in the microfinance sector:

First. The statistical models in MS Excel are based on conventional and, therefore, conservative assessment of the probability for default. When they are modified by including additional creditworthiness descriptors, their prediction accuracy can be improved. When there is no information (i.e. “NA” record) about a given indicator, its weight is better adapted to the final score!

Second. The key PD indicator is estimated for the entire repayment period. The PD values are further transformed into an annual empirical value for this indicator. Therefore, the model is iteratively adaptive to the customer base, taking into account the annual values of this key evaluation indicator. Thus, for each category of borrowers, a precisely established limit value of the weighted average evaluation variable (score) resulting from the introduction of all available descriptors is calculated. The score is the basis for following three possible decisions:

- the loan request is approved;
- the loan request is rejected;
- the loan request may be approved with a certain risk assumption.

The model is easy to adapt and modify by adding new descriptors that correspond to the specific regional characteristics of the borrowers.

Third. The data from the scoring model used in each regional office of the NBMFI can be used for supervision and control over the outstanding and repaid amounts by customer clusters. This would enable the management to determine the most profitable (i.e. those with lower risk exposures) loan maturity periods and adjust the repayment schedules accordingly as well as to decide what assistance to provide to certain regional offices or, where appropriate, consider their risk exposures. The approach to each region depends on the policy adopted by the NBMFI. Risk assessment, however, does not apply only to the financial sector and the microfinance institutions. Such models are applied practically in all business areas, including the most innovative ones, such as biotechnologies, electricity trade exchanges, etc. (Nedev, 2016)

Fourth. After 2010, NBMFIs implemented procedures for selection (or shortlisting) of both clients and employees. Although a lot of job applicants have previous experience in the financial sector, which gives them an advantage on the competitive microfinance market, there are also many inexperienced applicants for jobs in NBMFIs. However, empirical data regarding the volume of sales has shown that inexperienced employees often perform better than experienced ones. This was corroborated in practice during the expansion of Bulgarian NBMFIs in different cities and regions in Romania. On the other hand, managers who come from other NBMFIs quite often submit the entire client database of their previous employer to their new NBMFI and thus have personal contribution to the success of their new employer by enhancing their score model for risk and creditworthiness assessment.

Fifth. NBMFIs are mostly trying to recruit employees with previous experience in rival companies. The experience of the Bulgarian NBMFI branches in Romania shows that within 5 months such employees have a marked positive effect on the performance indicators of their regional office. For example, the repayment rate of such regional offices increased from 84% at the beginning of the period to 93% in 2019. The adopted "client shortlisting" procedure is restrictive, because it rejects most of the clients who request a new loan to repay an existing obligation. If such a request is approved, it would count as a new loan for the consultant and would result in an unrealistic assessment of their performance. Therefore, the adopted policy for rejection of refinancing (rollover) loans has a disciplining effect for both employees and clients. Thus, branches with significant volumes of outstanding (past due) payments are not allowed to issue new loans until their receivables reach a specified amount and maturity structure. This restrictive policy naturally forces the employees who cannot achieve their targets either to leave the company or increase their efforts to meet the set repayment targets. The "shortlisting" procedure is based on a statistical model, according to which an office with an outstanding receivables rate above 12% automatically gets a ban to refinance existing loans from the credit department of the NBMFI's headquarters. If the performance does not improve within a week, new sales are automatically banned and fines are imposed on branch-level management. Such measures, however, often lead to collective resignations, which results in staff shortage for the regional office but also reduces the amount of its outstanding receivables and improves its performance.

Sixth. The use of a sectoral communication approach often solves some specific loan issues and prevents the rollover of loans among different NBMFIs. Thus, if a loan taken from company A is then partially repaid with a loan from company B and then the borrower takes another loan from company A to repay part of the loan taken from company B, within 3 months the borrower will

usually owe money (principal and interest) to both companies. The NBMFIs created a common database for this type of borrowers, who account for 12% of all clients in this sector in Romania. The results of this method for exchange of information was a reduction of the bad credits by 16% annually.

Seventh. A loan request is either approved or rejected by the credit department on the grounds of the information submitted by the regional office, a verification of the client's the employment status, and a telephone interview with the applicant, which is an important but ineffective way to validate the available information. This widespread control method is often misleading due to the fact that there is no direct contact and it cannot establish whether and to what extent the applicant is a real person. The competition in the sector is fierce and the most important challenge is how to facilitate the approval process, how to conduct checks more quickly and efficiently, how to deliver money to the customer faster, and how to eliminate or mitigate the risk of fraud. Experience has shown that the shift from conventional to online lending reduces much of the company's costs, especially staff costs and overheads. The safety of online lending seems logical because the loan is paid to order into a bank account, but online lending cannot cover people who do not have bank accounts or access to Internet, who constitute a significant part of the market. According data collected from microfinance borrowers, only 35% of them have access to online banking. This is why about 60 percent of the NBMFIs in Romania offer a mix of online and standard services. The share of online lending grows by 8% annually and the number of NBMFIs who have their own online lending platforms is growing as well. The online lending model circumvents the regulatory interest rate restriction of up to 50% due to the fact that it significantly reduces staff costs and overheads while the APR with the conventional model varies between 240% and 360%, and the regulatory restrictions are circumvented in various ways, such as faster processing options, unsecured lending, etc.

Eighth. The regulators from the CB face the dilemma whether to continue disregarding the high interest rates charged by the NBMFIs or to impose harsher restrictions and thus to create an advantage for the commercial banks and force some of the NBMFIs to become shadow economy operators. Both Bulgaria and Romania adopted such policies for interest rate restrictions, on which the national associations of non-bank financial institutions having expressed their opinions several times. The first major change regarding the NBMFIs was made in 2012 with attempts to enforce requirements for tablets, in which the consultants enter the applicant's data and the scoring model automatically calculates the maximum amount of the loan that can be granted. Moreover, the tablets were to be used for scanning of documents as well as taking pictures of the applicant's property to be used as a loan collateral, thus

mitigating the risk of default. At the same time, the NBMFIs developed microfinance products that follow the credit card model. These innovations aim to mitigate the risk of fraud, to alleviate the lending procedures and to solve the most serious problem, viz. repayment delay and default.

Ninth. NBMFI's policy regarding bad credits is an important factor. Author's experience as a manager of a Romanian branch of Bulgarian NBMFI has shown that these credits constitute 22% of all loans. Every NBMFI has adopted its own policy on clients facing financial difficulties. An approved empirical model which gives positive results consists of the following steps:

- A borrower in delay of up to 3 repayment instalments is contacted by a call centre operator;
- Borrowers in delay of up to 6 repayment instalments are visited in person both in their homes and at their workplaces by their consultant and the office manager;
- Borrowers in delay of up to 9 repayment instalments are visited in person both in their homes and at their workplaces by their consultant, the office manager and an officer from the internal security department. However, there are so many clients in default that internal security officers cannot visit them all.
- Borrowers in delay of over 6 months are brought to court or their outstanding obligations are sold to debt collector firms.

Unfortunately, empirical experience has shown that 30% of the loans with past due repayment are fictitious or otherwise fraudulent. A newly established NBMFI cannot afford to sue so many of its customers because this will ruin its image. When a new NBMFI is launched, the risk of bad customers and bad credits is enormous. This is due to the fact that the rival companies from the sector exert serious pressure on their clients with past due payments to borrow from the new company in order to repay the money owed to them. A number of surveys have shown that about 45% of all applicants have obligations to rival companies, which is indicative of a vicious circle due to the fact that the microfinance companies cannot deal with these clients. Their outstanding obligations keep growing each month until they become permanent lawsuit defendants. This is why the information should be submitted to a central credit registry, which already operates effectively in Bulgaria. In Romania, however, such a practice still does not exist, and access to such information is available only for the commercial banks. NBMFIs also maintain a customer retention index, which shows whether an office works well with customers as well as the efficiency of information handling by its call centre. In Bulgaria, the average percentage of clients who take out a second loan is 45% but for some offices it reaches 65%. In Romania, the average percentage is around 15%,

which shows that most borrowers take out a loan only when this is very necessary. The index is useful as a fraud prevention tool as well.

Tenth. The model based on a PDA-equipped consultant with sufficient amount of cash on hand is not an alternative to the "office-based" lending due to the fact that the number of frauds committed by consultants is growing. Despite the fact that the personal visit model is convenient for the clients, because they do not have to go to the office of the company in person, according to recent surveys conducted in Romania, 7% of the clients would rather visit the offices of the non-bank financial institution to make their payments. Nevertheless, the number of companies that resort to innovative methods of promotion and lending is growing worldwide. According to various surveys, people rank first the speed of the approval procedure, followed by staff attitude, extension opportunities, and least of all the price of the loan. The individual consultations model is coming into its own because it provides opportunities for offering repayment schedules tailored to the client's specific characteristics. The standard office is being replaced by the so-called "money shop", where the main employee is the teller. On the other hand, the imposition of severe restrictions could restrict the access of many potential clients and lead to usury.

The above ten recommendations for successful business of Bulgarian NBMFIs in Romania are based on the author's experience as a manager in such a company and the logical but inevitable adaptation of successful financial management models to the local regulatory framework and market specifics.

* * *

The microfinance sector is a specific segment of the market for financial services, which is subject to national regulations and is an alternative to personal lending of commercial banks but offers credit products with consumer benefits that provide profitability and return, regardless of the competition of these banks. The penetration of a Bulgarian microfinance company on the market resulted in a rational market innovation and regulatory adaptation of the financial management and risk assessment procedures developed by the parent company.

References

Al-Azzam, M., & Mimouni, K. (2017). Currency risk and microcredit interest rates. *Emerging Markets Review*, 31, 80-95.
doi:10.1016/j.ememar.2017.03.001

- Bhaskar, T., & Subramanian, G. (2011). Loan recommender system for microfinance loans: Increasing efficiency to assist growth. *Journal of Financial Services Marketing*, 15(4), 334-345. doi: <https://doi.org/10.1057/fsm.2010.27>
- Bhavish, J., Ayush, R., Sheereen, F., & Hema, S. (2017). What Determines the Profitability of Non-Bank Deposit Taking Institutions? Some Evidence from Mauritius. *Journal of Developing Areas*, 51(4), 239-253. doi:<https://doi.org/10.1353/jda.2017.0099>
- Chopra, R. (2017). Financial Inclusion or Financial Destruction: A Case Study of Microfinance Institutions. . *Global Journal of Enterprise Information System*, 9(1), 85-89. doi:<https://doi.org/10.18311/gjeis/2017/15856>
- Cuéllar-Fernández, B., Fuertes-Callén, Y., Serrano-Cinca, C., & Gutiérrez-Nieto, B. (2016). Determinants of margin in microfinance institutions. *Applied Economics*, 48(4), 300-311. doi:<https://doi.org/10.1080/00036846.2015.1078447>
- Da Costa, R. (2017). The relationship between the performance and legal form of microfinance institutions. *Revista Contabilidade & Finanças*, 28(75), 377-389. doi:10.1590/1808-057x201703660
- de Oliveira Leite, R. (2017). Microfinance: Methodological Review and Research Agenda. *Revista de Contabilidade Do Mestrado Em Ciências Contábeis Da UERJ*, 22(3), 54-63. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=130585711&site=bsi-live>
- Dorfleitner, G., Röhe, M., & Renier, N. (2017). The access of microfinance institutions to debt capital: An empirical investigation of microfinance investment vehicles. *Quarterly Review of Economics and Finance*, 65, 1-15. doi:10.1016/j.qref.2016.06.005
- Ghiță-Mitrescu, S., Duhnea, C., Antohi, I., & Moraru, A. D. (2016). Non-Bank Financial Institutions - Actors in the Shadow Banking System. *Annals of the University of Oradea, Economic Science Series*, 25(1), 763-771. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=117726011&site=bsi-live>
- Guérin, I., Labie, M., & Morvant-Roux, S. (2018). Inadequate growth, over-indebtedness, and crises in microcredit: what have we learned? *Enterprise Development & Microfinance*, 29(2), 118-132. doi:<https://doi.org/10.3362/1755-1986.17-00013>
- Gurses, D. (2009). Microfinance and Poverty Reduction in Turkey. *Perspectives on Global Development & Technology*, 8(1), 90-110. doi:<https://doi.org/10.1163/156914909X403207>

- Hollis, A., & Sweetman, A. (1998). Microcredit: What can we learn from the past? *World Development*, 26(10), 1875-1891.
- Khachatryan, K., Hartarska, V., & Grigoryan, A. (2017). Performance and Capital Structure of Microfinance Institutions in Eastern Europe and Central Asia. *Eastern European Economics*, 55(5), 395-419.
doi:<https://doi.org/10.1080/00128775.2017.1336064>
- Khan, S., & Ashta, A. (2013). Managing Multi-Faceted Risks in Microfinance Operations. *Strategic Change*, 22(1/2), 1-16.
doi:<https://doi.org/10.1002/jsc.1918>
- Koubâa, H. F. (2014). Start-Up Informal Finance and Formal Microfinance: The Role of Human Capital. *Strategic Change*, 23(7/8), 415-423.
doi:<https://doi.org/10.1002/jsc.1986>
- Leyshon, A., Signoretta, P., Knights, D., Alferoff, C., & Burton, D. (2006). Walking with moneylenders: The ecology of the UK home-collected credit industry. *Urban Studies (Routledge)*, 43(1), 161-186.
doi:<https://doi.org/10.1080/00420980500409326>
- Lopatta, K., & Tchikov, M. (2016). Do microfinance institutions fulfil their promise? Evidence from cross-country data. *Applied Economics*, 48(18), 1655-1677.
doi:<https://doi.org/10.1080/00036846.2015.1105924>
- Marinov, I. (12 2017 r.). Sector "barzi krediti" v Romania i Bulgaria: razvitie i regulatorni spetsifiki . *Godishen Almanah Nauchni Izsledvania na doktoranti*, стр. 100-110.
- Nedev, T. (2016). Pazarat na elektroenergia v Bulgaria i vazmozhnostite za upravlenie na risk chrez godishni finansovi fucharsi i optsii FELIKS na evropeiskata energiina borsa (European Energy Exchange–EEX). *Research Papers*, 113-152.
- Nedunchezian, V. R., & Sivasankaran, N. (2009). Assessing the Performance of the Stakeholders of Mictofinance Programs. *ICFAI Journal of Management Research*, 8(1), 60-74. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=36085045&site=bsi-live>
- Nersisyan, Y., & Dantas, F. (2017). Rethinking liquidity creation: Banks, shadow banks and the elasticity of finance. *Journal of Post Keynesian Economics*, 40(3), 279-299.
doi:<https://doi.org/10.1080/01603477.2017.1356686>
- Pole, P., Asawa, A., & Shah, D. (2014). Securitization of Microloans: An Indian Perspective of the Innovation in Microfinance Industry. *IUP Journal of Applied Finance*, 20(1), 62-75. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=95087523&site=bsi-live>

- Pollinger, J. J., Outhwaite, J., & Cordero-Guzmán, H. (2007). The Question of Sustainability for Microfinance Institutions. *Journal of Small Business Management*, 45(1), 23-41. doi:<https://doi.org/10.1111/j.1540-627X.2007.00196.x>
- Popescu, J., Simionescu, M., Cărăba Meiță, L. N., & Popa, B. (2016). A Specific Solution to Decrease the Credit Risk at a Non-Banking Financial Institution. *Young Economists Journal / Revista Tinerilor Economisti*, 13(27), 19-28. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=124182942&site=bsi-live>
- Riggins, F. J., & Weber, D. M. (2017). Information asymmetries and identification bias in P2P social microlending. *Information Technology for Development*, 23(1), 107-126. doi:<https://doi.org/10.1080/02681102.2016.1247345>
- Saeed, A., Javed, A. Y., & Noreen, U. (2018). Microfinancing, governance, and performance: a South Asian perspective. *Journal of Economics, Finance & Administrative Science*, 23(46), 247-265. doi:<https://doi.org/10.1108/JEFAS-01-2017-0014>
- Sainz, F. I., Torre, O. B., López, G. C., & Sanfilippo, A. S. (2015). Crisis in Microfinance Institutions: Identifying Problems. *Journal of International Development*, 27(7), 1058-1073. doi:<https://doi.org/10.1002/jid.3129>
- Ssekiziyivu, B., Mwesigwa, R., Joseph, M., Nkote Nabeta, I., & Oyemomi, O. (2017). Credit allocation, risk management and loan portfolio performance of MFIs—A case of Ugandan firms. *Cogent Business & Management*, 4(1), 1-13. doi:<https://doi.org/10.1080/23311975.2017.1374921>
- Tchakoute Tchuigoua, H. (2018). Which types of microfinance institutions decentralize the loan approval process? *Quarterly Review of Economics and Finance*, 67, 237-244. doi:[10.1016/j.qref.2017.07.002](https://doi.org/10.1016/j.qref.2017.07.002)
- Yimga, J. (2016). The Impact of High Microfinance Growth on Loan Portfolio. *Journal of International Development*, 28(5), 697-714. doi:<https://doi.org/10.1002/jid.3144>
- Zahariev, A. (2012). *Debt Management*. V. Tarnovo: ABAGAR.

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