METHODOLOGY

FOR CREDIT RATING OF GUARANTEE FUND

Role of the guarantee fund

The credit guarantee is in its essence a type of financial product, which upon receipt allows the client to use it before a bank or other type of lender, as collateral for a loan. The credit guarantee is an assurance that in the event of bankruptcy or inability of the borrower to repay his loan, the last will be repaid by the guarantee fund. The main target group of guarantee funds usually includes entrepreneurs with micro, small or medium-sized businesses who have the capacity to service a loan, but for some reason such as insufficient size or type of collateral can not get a loan from a bank. The support and guarantee from a guarantee fund makes this possible. The applicant projects for guarantee should be well-grounded both economically and in business terms as well as have the full capacity and ability to service the respective loan.

It should be borne in mind that most guarantee funds receive some form of public or state support. However, there are guarantee funds that manage to cover their costs and even profit from their activities, but this is definitely not a mandatory condition.

Although the main goal of all guarantee funds is to provide better and easier access to formal financing for quality and promising entrepreneurs and their companies, there are large differences in the way they are set up and the way guarantee funds operate. There is no ideal type of guarantee fund. A given guarantee fund and its type is meant to fully meet the needs of the specific industry or segment to which they are directed.

The existing financing options in the specific sector, the social and cultural peculiarities of a given market as well as the normative regulations must be taken into account in the initial assessment of a guarantee fund.

Guarantee funds are different types, depending on the following characteristics:

a) the extent to which they have a guarantee reserve, the amount of which is directly affected by income and expenses funded and unfunded;
b) type of guarantees - whether they apply to individual clients or to entire portfolio guaranteed activities
c) what type of loans are guaranteed - corporate or institutional;
d) at what point the guarantees are provided - before the approval of the loan by the bank or after a pre-approved loan;
e) at what time the guarantees are paid - after the financial institution has taken measures to collect the outstanding debt or immediately in case of default by the borrower;
f) the structure of the owners - mutual or non-mutual;
g) CAP type guarantee schemes.

A. Any institution wishing to offer credit guarantees must convince its partner bank or lender that it is able to pay on behalf of the borrower in the event of the insolvency of its client. This is the reason why many guarantee funds maintain blocked funds or deposits in partner banks. In the case of funded guarantee funds, a bank account or an investment account is maintained, in which incoming fees from clients and income from investments are directly accounted for as income and they increase the size of the fund. The amount of the fund is reduced in case of repayment to the partner banks of loan indemnities, which are impaired but guaranteed. In case of unfunded fund type /this type of funds are often financially supported by the budget of a country, a state agency, European development program, etc./ open deposit accounts in the partner banks are not maintained, but at a certain reporting period the funds to the banks are reimbursed in connection with the deteriorated guaranteed loans. The advantage of unfunded schemes is that no effort is put into managing and investing the funds. Of course, such schemes can only be offered by public institutions and government agencies, as the risk of non-payment of issued guarantees is minimized.

B. Both funds issuing individual guarantees and those providing guarantees on a portfolio basis for a given industry or type of business are widespread. In the case of funds issuing individual guarantees, each client is individually examined for his creditworthiness. The guarantee fund has direct contact with applicants for a guarantee, which naturally imposes significantly more effort in the process of individual evaluation and requires more resources by this type of funds. This also results in a double assessment of the same borrower - once by the bank and once by the guarantee fund. This type of funds provides individual guarantees for each client for a specific loan. In the case of portfolio-based guarantee funds, guarantee funds do not pay special attention to each guarantee applicant, but instead, allow the partner bank to attach guarantee coverage to each loan that meets criteria previously approved by the guarantee fund. This type of scheme facilitates the work of the fund, as it does not perform individual assessments, and borrowers receive one assessment from the bank. A disadvantage of this type of funds is less control over the quality of the portfolio guaranteed by them. They are successful in the presence of full trust by the fund in the system of preliminary assessment of the partner bank.

C. In most guarantee funds, clients are small entrepreneurs. If they cannot repay their loan to the bank, then the guarantee fund repays it. This type of funds is company oriented. Another type of guarantee schemes specializes in guaranteeing loans to non-governmental organizations or microfinance institutions, which in turn provide funds to their members or partners. These are indirect guarantee schemes.

D. Ex-ante guarantee funds are these where the client presents his project first to the guarantee fund. If the fund approves it, a letter of commitment is issued to a guarantee and only then the client could apply for a bank loan. When the guarantee fund issues the letter of commitment for the loan guarantee, it is still not certain that the bank will approve the client for granting a loan, regardless of the guarantee. Ex-post guarantee funds are these where the bank first evaluates the project and approves it in principle. Then, based on the lack of sufficient collateral for the loan, the entrepreneur turns to a guarantee fund, which through a guarantee to provide him with better collateral for the loan. Despite the principle approval of the loan by the bank at this stage, there is still a possibility that the specific fund would not provide a loan guarantee.

E. Under some agreements with financial institutions, the fund's guarantees become due only after the financial institution has first taken steps to collect the outstanding debt using the collateral claimed by the borrower, other than the fund's guarantee. Such a procedure, in which the fund is not obliged to pay the guarantee immediately (but for example after taking legal enforcement action by the financial institution) reduces its liability and the risk of mandatory payment of the provided guarantees. Other agreements, however, require the fund to comply with its obligations as a guarantor if the borrower is not creditworthy or does not meet the other conditions and the financial institution terminates the contract, or when the financial institution sends the borrower an invitation to pay the loan and he fails to comply his obligation. This second type of procedure, in which the fund repays the guarantee immediately, bypassing the creditor's debt collection procedures, increases the fund's liability and the risk of compulsory payment of the guarantee. Although in theory, it is possible for one fund to have a different agreement with each financial institution and even a different agreement for each individual guarantee granted, usually only larger funds have the capacity to recover guarantees paid by borrowers and only they could use the second type of guarantee payment procedure. Small funds are more likely to use the first type of procedure because they are forced to rely on the capacity and legal experience of the financial institution in terms of debt collection.

F. Mutual Guarantee Funds are an association of entrepreneurs meant to provide loan guarantees to their members. This type of guarantee funds is usually founded by some type of commercial organization. The members of the trade organization finance the guarantee fund through shares or contributions, which are then used as a guarantee reserve when guaranteeing loans to members of the organization. It is possible in a good partnership between such a fund and a certain bank specific preferential banking conditions for the members of this fund be reached.

G. Capital Access Program Type (CAP) represents a specific form of guarantee mechanism. The objectives of the CAP are identical to those of standard guarantee funds, but their methodologies differ significantly. The CAP is similar to guarantee funds providing portfolio-based guarantees but differs in terms of how loans are guaranteed; how the scheme works with the partner bank; and how it is financed. CAP combines elements of an insurance program, has a provision nature and at the same time is a program financing economic development. The partner banks select the clients who meet the conditions of the program and it is appropriate to be included in it. The bank charges the client a fixed fee for the program, which is a percentage of the loan amount. It is similar to an insurance premium, varying depending on the risk type of the client, but is usually between 1% and 5%. Once the fee for participation in CAP is taken by the client, the guarantee fund gives the same percentage as the client /euro-for-euro basis/. Thus, the borrower's fee and the amount of the guarantee fund are credited to a general account, which is managed by the guarantee fund. The funds in this account are used to cover claims by the partner bank on impaired guaranteed loans, and the funds in this account are not kept individually for each loan but are used as a general guarantee coverage for the entire portfolio. In case the funds in this special general account of the CAP are not sufficient to cover the impaired credit exposures, then the difference is covered at the expense of the bank. The contribution at the expense of the guarantee fund may exceed by 1.5 or even 2 times the borrower's contribution depending on the focus of the program. Accordingly, the euro-for-euro basis will not be complied with.

CAP schemes are effective as they also allow a certain type of customer to receive preferential guarantees. Concurrently, the risk for the guarantee fund is clearly defined and the possible payments on claims related to impaired guaranteed loans have a predefined maximum amount. CAP programs generally have lower operating costs. Their administrative costs by default are low as credit claims are not subject to assessment and there are no other costs associated with the process of managing bad credit.

It is possible that this type of scheme will be more difficult to find a partner bank in the beginning due to uncertainty about the probability of loan default. A disadvantage of the CAP schemes is that in case they grow they will need additional funding in the form of capital annually.

Last but not least, in the case of CAP schemes, it should be borne in mind that the product becomes more expensive for the borrower, as he pays both the CAP participation fee and the standard loan costs due to the bank.

Methodology for a credit rating of a guarantee fund

Introduction

The methodology of BCRA - Credit Rating Agency (BCRA) for assigning a credit rating to a guarantee fund is designed to provide a comprehensive view of the fund's activities from every possible point of view. For example, the state of the country in which the fund operates, the state of the specific geographical area served by the fund, the state of the guarantee sector in the country, and especially the state of the fund itself (in the form of a comprehensive assessment concerning both the ability of the company to pay guarantees and the implementation of its mission and objectives). The analysis includes a number of quantitative and qualitative factors, which for greater clarity are grouped into the following categories:

1. Operating environment

- **1.1.** Sovereign risk
- **1.2.** General framework for the operation of guarantee funds
  - **1.2.1.** Legal environment

2. Subject of activity, sector and region in which the Fund operates

3. Development program, forecast and goals of the guarantee fund

4. Credit guarantee policy of the Fund

5. Management

- **5.1.** Ownership structure
- **5.2.** Management bodies
- **5.3.** Employees
- **5.4.** Internal regulations

6. Financial analysis

- **6.1.** Equity
- **6.2.** Guarantee activity
  - **6.2.1.** Concentration of guarantees provided
  - **6.2.2.** Quality of the provided guarantees
- **6.3.** Lending activity
- **6.4.** Liquidity
- **6.5.** Profitability

In addition to a guarantee fund rating, BCRA could also issue a national-scale's rating to a fund (see http://www.bcra-bg.com/). This type of rating is relative, in comparison to other rated entities in the country, taking into consideration only the specific risk factors of the entities and not the effect of the local environment on them. That is, the national-scale rating does not represent an absolute evaluation of creditworthiness, but only a relative evaluation within the bounds of given country. For this reason, it is impossible to draw any comparison between national-scale ratings of entities from different countries. BCRA issues national-scale ratings when a sufficiently large sample size of rated entities is available for the given country, which would allow one to draw comparisons between those entities.

The elements of the analysis of a guarantee fund

1. Operational environment

The operational environment in which a guarantee fund operates includes the most general political and economic situation in a given country, but also the development of the guarantee sector in particular. The analysis of the full picture allows us to situate the specific fund in the context where it operates, in terms of its mission and strategy, but also in terms of the risks ahead.

1.1. Sovereign risk

A transparent and favourable political and legal environment in the country is an absolutely necessary prerequisite for the successful development of investment activity by both local and foreign companies. Also, fiscal and monetary policies of the government have far-reaching and often long-lasting effects on investor optimism and initiative.
Sovereign-risk factors are evaluated by BCRA using the Sovereign Rating Methodology (see https://www.bcra-bg.com/en/methodologies). The analyzed rating factors in this Methodology are:

- Institutional and political risk
- Macroeconomic sustainability
- Fiscal flexibility
- Monetary policy and financial stabilit

1.2. General framework for the operation of guarantee funds (Sector)

It is necessary to first analyse the history and economic function of the funds in the country in order to properly position the rated fund against the background of the sector. The recent development of the sector is monitored, including the number of funds, their capitalization, the number, total value and average value of the guarantees provided by them, etc. This information is considered both for the sector as a whole and by groups of funds, classified by capitalization or by the region.

The activity of guarantee funds is directly related to lending provided by financial institutions, which, in turn, is both the cause and result of entrepreneurship. The activity of guarantee funds is also featured by statistics on the type of clients to whom credit guarantees are most often provided (such as SMEs) and the financial institutions that grant loans, guaranteed by the fund. Changes in the structure of the population (number and density) by individual regions and their economic activity (employment by sector, unemployment, average gross wages, number of economic entities, significance for the country's GDP) are also monitored.

The development of the real economy and the financial sector in the country are closely linked and usually share the benefits and risks of entrepreneurship, although not equally. Basic banking system and prudential indicators that are taken into account are, for example, the number of banks, the number of branches, the value of loans, capital adequacy, financial result, efficiency, etc. Particular attention is paid to the dynamics of loans to SMEs and households, as these groups are more in need of credit guarantees, as they are less likely to have sufficient liquid assets to secure loans.

1.2.1. Legal environment

The natioanal legislative environment in which the funds operate is analysed. The more significant laws, regulations, provisions and codes are listed chronologically, briefly describing their significance for the funds' activity.

2. Subject of activity, sector and region in which the Fund operates are analised through:

- the historical development of the fund since its establishment, including its structure, mission and objectives in brief and the significant changes in them;
- the geographical location of its registered office, its subsidiaries and the coverage of its services;

- the activity of the other guarantee funds in this region, compared to the national average;
- data on demographic situation (such as population change and population density) and economic activity (including unemployment, number of employees, number of business entities) in the region of operation of the fund (or larger cities in the region).

Based on the information received about the mission and vision of the rated guarantee fund, it is determined which type of the given guarantee fund it is.

3. Development program, forecast and goals of the guarantee fund

This part of the analysis includes the strategic goals of the fund and the plan for their implementation for the next few years, if any. The three-year forecast of the fund for the value of the guarantee capital, the number, value and the residual value of the provided guarantees, and the multiplier of the fund (the ratio of the provided guarantees and the guarantee capital) are reviewed. The main points of the fund's strategy are considered (such as training activities, marketing, offering new services, planned changes in equity and guarantee capital, cooperation with national and international organizations or financial institutions, mergers or acquisitions of other funds, etc.) as well as the extent to which it will help the fund achieve its mission.

Promotion and marketing of the fund are viewed, as well as its sales channels, participation in conferences or meetings with the general public by entrepreneurs and/or banks. If any, marketing agreements and interactions between the fund and third parties such as banks and financial institutions are briefly described.

4. Credit guarantee policy of the Fund

All the main activities of the fund are analysed as their individual elements may vary as appropriate. Usually, the last include agreements with other funds, projects and funding initiatives; significant restrictions in the activity of the Fund, caused by the legal framework or the internal regulations of the fund; the order and procedure of the fund for granting credit guarantees, for monitoring of already provided guarantees, for payment of required guarantees to the bank, which has granted the loan and for risk assessment.

5. Management

5.1. Ownership structure

The number and weight of the shareholders of the fund are analysed, including any recent changes in them. The presence in the shareholder structure of a local municipality or a financial institution is positively assessed, especially if it is related to the distribution of part of the resources under the various financing programs. The potential of shareholders to provide additional financial support if needed is reviewed.

5.2. Management bodies of the Company

The management structure of the fund and changes in it during the period under review are analysed. The number of the members of the Management and Supervisory Boards and their qualifications are of particular importance, as well as the process of nominating new members and the length of their terms of office. The well-defined functions of the members and their competence and experience, (including when nominating for committees in the management bodies concerning compliance, remuneration, audit, appointments, and management of the Supervisory Board, etc.), and, last but not least, independence on internal influences are positively assesed. A special attention is paid to the qualifications and experience of the Chairman of the Management Board.

5.3. Employees of the company

The changes in the number of employees (including part-time or trainees) of the fund and the regulations for their organization and activity are analysed. The labour force is also viewed through the number of newly hired or left employees during the last reporting period. The risk of not being able to find qualified workforce in the future is also assessed. High degree of rotation or shortage of staff are assessed negatively, especially in terms of management positions.

The trainings and exchanges of know-how in which the employees participate are briefly described. It is also viewed whether the remuneration of employees is fixed or varies depending on their results. The successful motivation of employees is assessed positively, but at the same time it is extremely important to pay attention if the remuneration structure lead to a conflict of interest. An increased risk of such conflicts superimposes an analysis of the mechanisms for monitoring employees and even more generally, the mechanisms for internal control.

5.4. Internal regulations

The rules and documents regulating the activity of the fund are listed (for example, organizational regulations, regulations for granting credit guarantees - individual or by portfolio of standardised transactions, regulations for creating reserves, methodology for assessing the guarantee risk, etc.). When regulations are approved by third parties as regulators or national and international organizations, the emphasis is on this as a favourable factor. In general, a well-established system of procedures that is applied systematically and consistently is positively assessed.

6. Financial analysis

While the previous sections in the analysis of a guarantee fund give us a theoretical idea of the environment and framework of the fund's activities, financial analysis is most closely related to the efficiency and effectiveness of the fund in practice.

6.1. Equity

The dynamics of equity and liabilities during the period is analysed both in absolute value and as a percentage of total assets. Particular attention is paid to the total liability ratio (total liabilities to total assets) and the interest rate ratio (interest-bearing debt to the sum of equity and interest-bearing debt). The dynamics for the last five years are reviewed at the initial rating, and only last year at the updates. Both the direction of the dynamics and the reasons for it (changes in the share capital or reserve capital) are commented.

If the fund creates specific or general reserves to cover losses or unidentified risks of offering guarantees, the internal rules and the formula for calculating these reserves shall be analysed. The five-year dynamics of reserves and, more specifically, possible sharp changes in the share of reserves in the portfolio of active guarantees are reviewed. On the one hand, the presence of large reserves, especially specific, means that there are a lot of arrears in the portfolio, while on the other, covering with reserves a large part of the guarantee portfolio will not significantly affect the financial result of the fund, in case of unfavourable trends. A trend of increase in the amount of specific reserves without any change in their rates is assessed negatively.

6.2. Guarantee activity

The guarantee capital i.e. the funds that serve to secure the guarantees provided by the fund are reviewed, which show its guarantee potential. The dynamics of guarantee capital in relation to the value of active guarantees, including those within financial programs and initiatives, is essential. Other indicators of key importance for both the success of the fund and the risks to it are its capital multiplier (the ratio of active guarantees and guarantee capital) and the capital multiplier of the sector (the ratio of the value of loans guaranteed during the year and the value of newly issued guarantees). The optimal and achievable values of the fund multiplier are different depending on the stage of development of the fund and its participation in funding programs. High values of the sector multiplier are favourably assessed as they indicate the readiness of the fund's partner financial institutions to share part of the risk. Once trusted by lending institutions, the fund is in a much better position to improve access to finance for a specific target group without increasing the risk to its equity proportionately.

6.2.1. Concentration of guarantees provided

A portfolio of guarantees, which is well diversified by sectors, is positively assessed. Trends in preferential treatment of one or two sectors among the newly granted guarantees are assessed negatively, unless this is explicitly stated in the fund's mission.

Besides, the guarantee portfolio is analysed in terms of the value of individual guarantees, considering not only the average level, but also the distribution of values by size.

6.2.2. Quality of provided guarantees

The number and amount of claims of financial institutions to the fund for payment of provided guarantees are analysed as well as the historical abilty of the fund to repay them. An alarming trend would be an increase in the number of claims (in absolute terms and as a percentage of current guarantees). Sharp negative changes in these indicators, as well as in the amount of guarantees provided for overdue loans or for restructured and renegotiated loans may be symptomatic of:

- qualitative changes in the economic environment;
- lossening of the control over the granting of credit guarantees;
- reduced efforts by the fund to monitor loans;
- reduced efforts by financial institutions to monitor loans and collect debts from the client;
- other significant changes in the environment or the fund itself.

The possible reasons for the negative trends in the indicators are reviewed and the steps taken by the fund to change the situation are assessed, except for cases where such trends are desired from the point of view of the fund's mission. Any changes in the number of paid guarantees are assessed doubly as a percentage of the number of claims. On the one hand, a reduction in disbursements could damage the fund's reputation with credit institutions (and consequently lead to a reduction in the sector's multiplier). On the other hand, an increase in disbursements may be indicative of reduced monitoring by the fund, which in the future will lead credit institutions to presume upon the fact that the company pays all claims without any problems.

6.3. Lending activity

The loan portfolio and the level of reaching the credit potential of the rated company (the ratio of the residual value of loans and loan capital) are analysed in historical perspective, and values close to 1 are an indication of an efficient use of the funds.

Emphasis is placed on the current condition and quality of the loan portfolio, by reviewing the loans that are in arrears, the exposures requested by the clients for reimbursement as well as the reimbursed ones.

Particular attention is paid to new loans and to the interrelation of the volume of the fund's lending activity to its guarantee activities. The supply of a wider range of products in pursuit of achieving the fund's mission positively is assessed.

6.4. Liquidity

The main types of assets of the fund in absolute value and as a share of total assets are analysed. The levels and trends in current and fixed assets are monitored, the latter being rather an exception for guarantee funds. It would be worrying if the share of current receivables rises sharply, as these are usually amounts of recoverable guarantees paid and the risk of uncollectibility can be significant or difficult to predict.

It is necessary to view in more detail the maturity structure of financial assets. The risk assessment is parallel to the assessment of other indicators, as lower maturity is usually associated with higher liquidity, but also lower interest yields. Hence, the optimal maturity structure is a function of the guarantees provided, of the current liabilities, of the fund's objectives and of the general condition of the financial environment.

Likewise, the concentration on banks of bank deposits of the fund should be assessed. The dominant position of only one or two banks is assessed negatively, especially if there is a suspicion of an increased risk of default on deposits. Under the current agreements with the partner financial institutions, it is assessed to what extent the fund is obliged to keep blocked funds in their accounts, as this may affect the concentration of liquid assets.

Liquidity ratios of guarantee funds are usually very high due to the lack of significant fixed assets. Sharp declines in the ratio of current assets or cash to current liabilities are analysed and assessed in terms of the fund's objectives.

6.5. Profitability

The dynamics of the revenue sources of the fund in absolute values and as a percentage of the total income is analysed. The ability of the fund to attract subsidies is positively assessed. If the fund is expected to receive a new type of subsidy or not to renew old subsidies in the future, it is analysed how this will affect the projected revenues.

Financial revenues are particularly important for the guarantee funds as well as their exposure to downward interest rate risk. A sharp decline in interest income over time or relative to other funds without a clear reason is assessed negatively.

Net sales revenue consists mainly of fees for providing credit guarantees. Changes in these fees should be assessed not so much in terms of business considerations, but rather in relation to the fund's objectives (such as improving access to credit for a particular type of client).

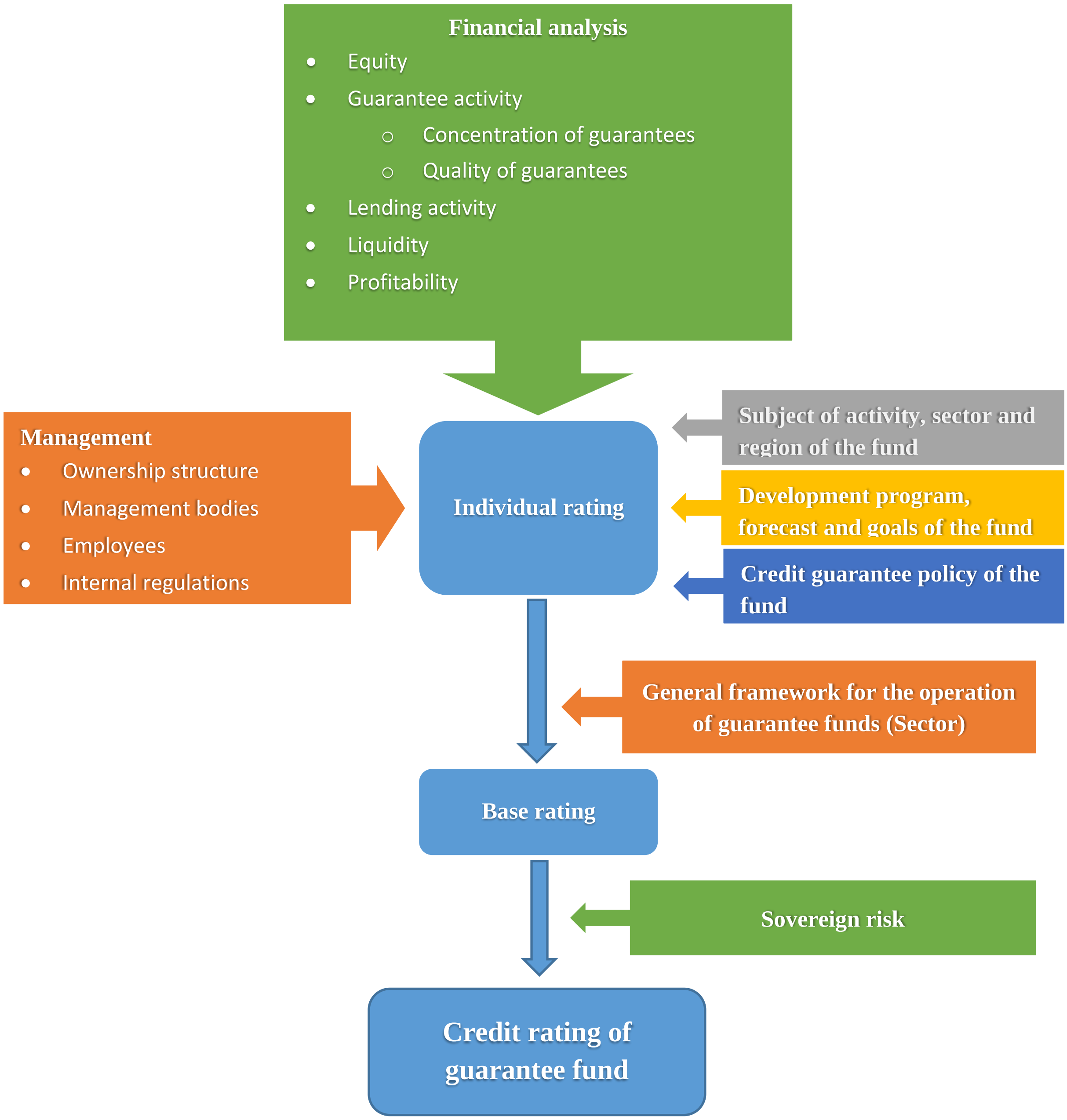
Sharp increases in expenditures and their individual components are also viewed through the prism of achieving the fund's objectives, for example if participation in financial programs and initiatives leads to increased costs for remuneration or external services.

The fund's ability to make a profit from sales cannot be assessed unambiguously, but depending on whether the fund has a social mission or a non-profit purpose. In both cases, however, the reasons for any abrupt changes in this and other similar performance indicators are identified.

High value and growth in the ratio of the value of the financial income index to operating expenses are positively assessed. This ratio is a suitable indicator of the extent to which the fund manages to cover the costs of its operation with the revenues from fees, without using the funds from the subsidies and its guarantee capital, which are entirely for the guarantee activity.

Effective as of December 4th 2020

Appendix A. Model for evaluation, calculation of indicators and determination of guarantee fund rating.



In the process of assigning a credit rating to guarantee fund, BCRA uses a Model for evaluation, calculation of indicators and determination of guarantee fund rating (Model). The result of this Model serves only as a useful additional information for how a specific fund's quantitative and qualitative indicators and the complex assesment based on them have evolved over time in comparison with the other guarantee funds - clients of BCRA. The Rating Committee inevitably takes note of the result of the Model but is not confined thereby in its decision and instead has the opportunity to take advantage of the expertise of the analysts and agree on a rating different from the Model-implied rating whenever the specifics of the fund or its environment calls for it.

On the basis of the different indicators included in the Model, we aggregate their values into a single complex assesment, isolated from the direct effect of the external factors of the immediate environment. This assesment we term the individual rating of guarantee fund. We further adjust this individual rating a number of notches down due to the risk profile of the guarantee sector in the country as well as the more general sovereign risk.

In relation to the risk profile of the sector in the country, the factors analyzed and which could lead to an adjustment in the individual rating are:

- Legal envieronment (framework).
- General condition, main participants, performance and trends in the guarantee sector. Main indicators of the sector.
- Sector risk profile.
- Ability of the system for income generation.
- Ability of capital to absorb shocks.
- Capacity to meet liquidity pressure.

The result of the adjustments made to the *individual rating* of the guarantee fund is the so-called *base rating*. The final stage of the calculation of the guarantee fund rating is the potential adjustment of the *base rating* due to the general sovereign-risk factors, as evaluated by BCRA using the Sovereign Rating Methodology (see https://www.bcra-bg.com/en/methodologies). The analyzed rating factors in this Methodology are: 1) Institutional and political risk, 2) Macroeconomic sustainability, 3) Fiscal flexibility, and 4) Monetary policy and financial stability. Funds which operate in a risk-prone environment, perhaps more so than other rated entities in the country, are inevitably impaired by those external factors outside their control, which present a limit to the ratings of all entities in the country. The *rating ceiling* is the term used for this limitation on the credit rating of guarantee fund caused by sovereign-risk factors. Slightly less limited are the ratings of those funds whose direct or indirect majority shareholder is a foreign institution able in one way or another to make up for the deleterious effects of the local environment. The *ceiling* of such subsidiaries would surpass the sovereign rating by one or more notches, which in turn cause their final Model-implied bank financial strength rating to surpass the sovereign rating.

$$\boldsymbol{Credit\ rating\ of\ guarantee\ fund} = \begin{cases} \boldsymbol{ceiling}, & \boldsymbol{ceiling} < \boldsymbol{base\ rating} \\ \boldsymbol{base\ rating}, & \boldsymbol{ceiling} \geq \boldsymbol{base\ rating} \end{cases}$$

Main rating factors and corresponding weights in the model

Rating factors			Weight
Qualitative indicators		100.0%	**36%**
	2. Subject of activity, sector and region in which the Fund operates	12.5%	
	3. Development program, forecast and goals of the guarantee fund	12.5%	
	4. Credit guarantee policy of the Fund	12.5%	
	5. Management	62.5%	
Quantitative indicators	6. Financial analysis	100.0%	**64%**
	6.1. Equity	14.3%	
	6.2. Guarantee activity	42.9%	
	6.3. Lending activity	14.3%	
	6.4. Liquidity	14.3%	
	6.5. Profitability	14.3%	

Appendix B. Rating scale.

The credit ratings of the guarantee funds are assigned according to the BCRA Global scale. (see https://www.bcra-bg.com/en/rating-scales)