



## **APPETITE FOR RISK OF THE BANK (I)**

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**Gheorghe MANOLESCU, PhD. \***

### **Rezumat**

*Reprezentând „cantitatea” de riscuri pe care o bancă este capabilă și dispusă să o accepte în urmărirea obiectivelor sale astfel încât să echilibreze nevoile tuturor părților interesate, apetitul (înclinația) pentru risc este exprimat atât în termeni cantitativi, cât și calitativi, și acoperă toate riscurile, nu numai pe cele privind aspectele financiare, așa cum s-a înțeles în ultimii ani.*

*Problematica apetitului pentru risc cuprinde aspecte, precum: contextul manifestării apetitului și relația sa cu aversiunea față de risc; declararea și comunicarea de către bancă, în mod corect și transparent, a apetitului său pentru risc; aplicarea apetitului pentru risc; determinarea, evaluarea și măsurarea apetitului pentru risc al băncii.*

*Înțelegerea apetitului pentru risc va fi posibilă numai atunci când riscul la nivelul băncii va fi văzut în contextul profitului potențial și al cerințelor de capital, iar perspectivele afacerii băncii vor fi agregate într-o imagine (portofoliu) a strategiei băncii, o abordare consistentă a apetitului pentru risc echivalând cu o abordare a strategiei băncii, fiind necesar ca întreaga conducere de vârf a băncii să se implice.*

*Apetitul pentru risc este un concept în evoluție, care necesită un efort continuu de cercetare și, deși acesta este încă neclar, el este un instrument util pentru gestionarea riscurilor în cadrul băncii, ca întreg.*

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*\* Univ. Professor, Spiru Haret University - Bucharest, scientific researcher I, Centre for Financial and Monetary Research “Victor Slăvescu”, Romanian Academy.*

**Abstract**

Representing the "amount" of risk that a bank is able and willing to accept in pursuit of its objectives, so as to balance the needs of all interested parties the risk appetite (propensity) is expressed in terms of both quantitative and qualitative, and covers all risks and not just financial risk, as understood in recent years.

Risk appetite problems include issues such as the context and relationship of the risk appetite to the appetite risk aversion, fair and transparent declaration and communication of its risk appetite of the bank, applying risk appetite, determining, assessing and measuring risk appetite bank.

Understanding the risk appetite will be possible only when the risk to the bank will be seen in the context of potential profit and capital requirements and business prospects of the bank will be aggregated into a picture (portfolio) of the bank's strategy, a consistent approach to appetite risk equivalent to a bank's approach to strategy, requiring that the entire top leadership of the bank to get involved

Appetite for risk is an evolving concept that requires a continuous effort of research and although the concept is still unclear, the appetite for risk is a useful tool for risk management within the bank as a whole.

**Keywords:** appetite for risk, capacity for risk, bank risk management, risk profile, measuring appetite, economic capital, guiding value, discount factor.

**JEL classification:** E10, G11, G32

**Context of the appetite for risk**

Probably one of the most important aspects of the risk management in banking (RMB) is the appetite for risk.

Obviously, the main function of RMB is not to reduce or cancel, rather to limit the probability of danger at a level which the management and the board consider possible to maximize the value of the bank. The words of Jawaharlal Nehru, Indian Prime Minister, seem more than adequate to describe the potential threat of trying to minimize and cancel the risk: "*the policy to be too cautious is the highest risk ever*".

Although the conception and implementation of the appetite for risk failed during the crisis, its significance remains: formalization of the basic principles of the banking activity – explicit assuming of the risks, conscious decision-making based on the risk-reward substitution, accentuation and understanding of the possibilities to obtain different outcomes from the banking decisions and making decisions when the risk that the bank incomes, liquidity, solvability etc., which aim bank's reputation, fall below specific limits which the bank managers and shareholders would not accept.

The appetite for risk represents the dimension and type of risk which a bank is able and willing to take in pursuit of its objectives so as to balance the needs of all stakeholders, acting both as risk manager and as manager of the current and future activity of the bank. It is expressed both in terms of quantity and in terms of quality and it covers all the risks, not just those regarding the financial aspects, as it was understood lately.

Until recently, for the banks, the appetite for risk was a rather abstract notion expressed in very general situations, regarding the targets for credit rating or earnings volatility; it aimed two additional, yet very important dimensions: the potential impact of an event on the risk reputation and the potential impact which a risk event would have on the organising capacity of a bank in pursuit of its strategy.

Due to this abstract approach, the banks often assumed quite substantial risks in particular business areas and fields, in excess of those which the bank as a whole, as entity, would have been willing to take. Recently, the banking sector warranted the explicit incorporation of the appetite for risk at the level of the bank entities, undertaking efforts and actions to this direction, aiming to consolidate the influence of this attitude on the commercial and crediting banking activities; the dynamics of this banking attitude was acknowledged and monitored continuously.

In order to understand the appetite for risk and its configuration, one has to take into consideration the following three aspects:

1. **The appetite for risk versus the capacity for risk**; the management must define the bank's capacity for risk. The capacity for risk can be defined as the maximal level of risk which a bank is able to assume, depending on its capital, liquidities, borrowing capacity and legislative constraints. A key element is the decrease of the probability of financial difficulties, which might maximize the value

of a bank, aiming thus an optimal credit rating and the cost of reducing the probability for financial difficulties. The purpose of determining the appetite for risk is not to use the full capacity of risk; there has to be a “buffering” capacity available for risk, if the conditions turn adverse.

Thus, once the capacity for risk is defined, in order to size its appetite for risk, a bank must decide how large is the buffer between the maximal risk which it is able to take and the risk it has to take in pursuit of its strategic goals.

2. **The appetite for risk must be in agreement with the strategic goals of the bank.** Thus, the bank has to decide whether to sacrifice or to change the goals or whether to cancel or reduce some of the constraints regarding the capacity for risk (capital, liquidity, borrowing capacity).

3. **The appetite for risk, defined at the top bank level as a compromise between the assumed risk and the capacity to mobilise capital or liquidity** generates a variety of discussions regarding solvability, liquidity, incomes and earning volatility; the credit rating, reputation and brand; expansion towards new products, groups of clients or countries; environmental impact; corporative governance and human resources. The appetite for risk should be in agreement with the culture of the bank and with its capacity to manage the risks inherent to its activity.

4. **The top management of the bank decentralises the risk capital** by supporting the systems allocating the capital and evaluating the performance which are aimed to motivate the managers throughout the bank to take investments and exploitation decisions which optimize this decentralisation.

The risk appetite can be evaluated under three forms:

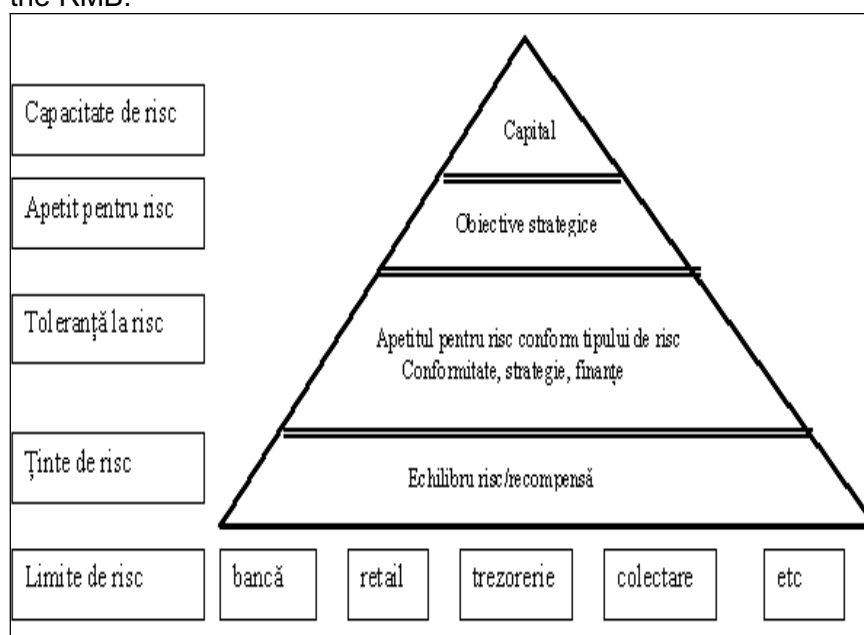
- **quantitative:** rough risk measures, which define the type and amount of risk which the bank is willing to assume in direct connection with the business plan and with the risk-measurement processes (for instance, the appetite for wage volatility);
- **qualitative:** not any risk is measurable, but it may affect the business performance of the bank (for instance, the appetite for commercial activities outside the basic competencies);
- **zero tolerance:** a subset which identifies the risks which must be avoided (for instance, the appetite to comply with the banking rules).

The risk appetite, correlated with the strategic goals of the bank, must be first translated into the **risk tolerance** for some risk categories (for instance, strategic, operational, financial and compliance risk). The risk tolerance expresses the maximal risk a bank is willing to assume for each relevant subcategory (for instance, the ceiling of credits, maximal losses by fraud). The next step is the **set the risk objectives**, to which every actional, business unit has to refer; such a risk target would define the **balance between risk and reward** by correlating the risk tolerance with the specific business plans and with the measurement indicators. The risk objectives must rely on the aimed return, on the risks taken to achieve it and on the operational capacities to manage such risks.

The risk target can be expressed as a point between a higher and a lower limit of risk, which are **thresholds** used to monitor that the exposure to risk doesn't deviate too much from the optimal level.

Trespassing the risk limits will trigger corrective actions at the process level.

The figure below shows the integration of the risk appetite within the RMB.



The risk appetite can be influenced both by systemic factors (economic environment of the bank) and by intrinsic factors (bank specialisation, goals, focus of the activities etc.). Starting from here, it is clear that the risk appetite varied a lot among the individual banks. The competition market, the approach of the risk appetite and the balance with the banking objectives are critical aspects to distinguish the competitiveness and success.

The formulation of the risk appetite as part of setting the strategic goals of a bank to assume risks, can help the bank attain its business objectives, while observing and planning the constraints, including the concept of risk appetite within the process of budget composition and designing of the future incomes.

The importance of the risk appetite is increasingly acknowledged and it will be one of the essentials of improving the stock exchange rating of the banks.

The clear and comprehensive communication of the risk appetite at the level of the whole bank is essential and the bank policy can be an instrument disseminating the vision of the bank beyond the people actually involved in setting the risk limits and tolerance.

A bank which communicates efficiently the risk appetite can draw capital more easily, can recruit higher quality staff and can gain the trust of the regulatory bodies. Obviously, an individual bank cannot disclose in detail to the public information regarding its risk appetite. However, a comprehensive explanation of the processes determining the risk appetite will be beneficial for all stakeholders: investors, rating agencies, suppliers, regulatory authorities etc.

#### **Determination of the risk appetite**

The risk appetite is a term frequently used in risk management. However, there is a lack of useful information regarding its use outside the financial risk or other risks that can be easily expressed in financial terms. The risk appetite, at the bank level, is, as mentioned previously, the value of risk exposure or of the potential adverse impact of an event which the bank is willing to take or retain. Once the risk appetite threshold has been trespassed, risk management processes and controls takeover and act to bring the exposure level back to the accepted interval.

In order to define the risk appetite of a bank and to determine the acceptable risk level we first need to answer the following questions:

- When should limited time and resources be allocated to minimize the risk exposures? Why?
- Which is the level of risk exposure which calls for immediate action? Why?
- What risk level requires a formal strategy of response in order to alleviate the potential impact? Why?
- What were the past events, and how have they been managed? Why?

Each question is followed by a “Why?” because the bank should be able to articulate its quantitative and, possibly, qualitative basis of the risk appetite or else it will revert to the orientation towards the past (only on the basis of the historical events) or event to the arbitrary orientation.

The development of a strategic methodology and approach helps the bank and its security, risks and control departments to develop and articulate their risk appetite.

The picture of the risk appetite includes three key-elements:

- Impact or severity table;
- Probabilities table;
- Risk appetite table.

**Impact table**

Impact rating	% of the „impacted” systems	% of the „impacted” employees/clients	Financial impact
1			
2			
3			
4			

The deterioration of the brand or the loss of bank reputation often means bankruptcy of the bank.

**Probabilities table**

- It takes into account the probability of an event that might impact on the bank: natural, economic, politic, social, psychological, other;
- The range of approaches to the definition of probabilities is ordered from qualitative to quantitative, from simple to complex.

Probability rating	Incidents
1	Improbable:
2	Probable:
3	Imminent:
4	Immediate:

**Risk appetite table**

- ✓ It helps the banks align the exposure to real risks with the management and the expanding activities;
- ✓ An even or risk is evaluated and it receives a risk score calculated by the multiplication of the impact and risk marks;
- ✓ The risk scores are then associated to different levels of management involvement;
- ✓ The levels of expansion from the risk appetite table will be the same with those from the impact table;
- ✓ The real risk level from the risk appetite table will usually be lower than the classification in the impact table because of the probability that the actual risk gets a lower position in the general standing;
- ✓ The incidents or events within the process will have 100% odds to occur and, therefore, their level in the risk appetite table must be equal with the impact table rating.

Risk level	Risk score	Action/response
Low	1 -4	
Medium	5 - 8	
High	9 - 12	
Crisis	13 - 16	

Risk score =  $S \times P \times D$

where:

S = severity (direct cost or impact on the bank);

P = probability that an event occurs;

D = detectability of the cause before an event occurs.

- A risk score is associated to each hazard, determined by the multiplication of the ratings;



- The result shows the evaluated risk associated to each event (interval 10 - 60);
- For the events which have alleviation plans, the summary of the initial risk must rely on the assumption that there are no plans or that they failed (this will identify the size of the hazard).

The recent changes in the regulations on the implications of security, risk and control increased the awareness on the concept of risk appetite, particularly at the management level. Many banks are currently confronted, at all management levels, with risk management in general, with the understanding and enforcement of significant processes, measures and strategies related to risk appetite.

At the first sight, the described process might look like a mere exercise of risk mapping. Actually, this exercise should apply to the risks identified previously, within a risk mapping project. The way in which the risk appetite is foreseen and in which the risk management processes are monitored is traced in the continuity of banking activities, in incident management, in business management and their strategic implications, which go much beyond the mere risk identification.

The first step in the development of the risk appetite of a bank is the identification of the **main stakeholders**. They can be any person, group or entity with rights on the activity, resources or results of the bank, or which is affected by the bank. The stakeholders display a tendency to monitor decision making, the evaluation and measurement of the risk appetite. They can be internal or external, while not neglecting those which impact on the wages and bank performance.

Once the stakeholders have been identified, the **list of interests, benefits and results** which the stakeholders request from the bank may include: value of the shares, conformity with regulations, safety of banking products and services, confidentiality of the personal information.

The interests, benefits and results which the stakeholders request from the bank often are defined at a high level, which makes it difficult to articulate the direct impact which an executive position has on the banking outputs. For instance, the shareholders are interested in a higher value of their stock and it is hard to know whether an executive position impacts directly on the stock value by the manner of risk management. Nevertheless, the efficient cost management and the

reduction of the loss-generating events may have a positive impact on stock value. Ultimately, the business strategies and the functional strategies of the bank are conceived with the purpose to create value to the key stakeholders. The **guiding values** therefore, are key-elements or dimensions of the performance which the bank needs in order to meet stakeholder demands. These values must be allotted to the level where they can be managed. The potential guiding values for each group of key-stakeholders must be identified, but they have to be limited to those ones on which the program of bank security, risk and control may have a significant impact.

The **key risk factors** must be derived from the guiding values and this is a three-stage process:

4. Identification and understanding of the guiding values that may be relevant to the bank and its functions, which usually requires the assignment of the values to the relevant level of bank management;

5. Selection of the proper measurements to be used for each key risk indicator;

6. Determine the adequate thresholds for each key risk indicator;

For instance:

- The financial guiding values: higher incomes; lower costs; prevent the loss of assets.

- The key risk indicators are: income lost due to cessation of activity; increase of the costs outside the budget; the euro value of the lost assets.

The thresholds for each key risk indicator are ordered according to levels: level 1 between -----; level 2 between ---- etc.

One of the most difficult aspects of defining the risk appetite is to develop a **wide range of key risk indicators** and then to set the thresholds for each level so that the comparable effects are managed carefully throughout the bank. For instance: how can a potential loss in euro be compensated with the number of clients unable to receive assistance for two days? Or, is a loss of one euro equivalent with a one euro increase of the costs?

It is similarly important to take into consideration the **way of setting the thresholds**, in terms of organisation, taking into account the fact whether the risk management program is developed within an independent bank, a global financial corporation, or from a functional

perspective. Each threshold must activate the next level of organisation at which the risk must be managed. This is a real manifestation of the risk appetite when the risk management is increasingly tightly aligned to the availability of the bank governance to accept specific risk levels. These thresholds of the levels of impact should be proportional with the level at which the bank decisions with similar implications are taken.

**Ways of applying the risk appetite**

The banks use various ways to determine the risk, from the mere qualitative measurement (definition of the risk categories and setting the associated risk levels) to the development of complex quantitative models of economic capital and income volatility.

Irrespective of the adopted approach, the risk appetite, if properly articulated, can become a determining component of the risk management within a particular bank.

The table below shows the relations of the risk appetite within the risk management strategy.

Framework	Relation with the risk appetite
Risk governance	Clear statement of the risk appetite, approved by the bank leadership, materialized in the risk policy and delegation of authority, facilitating a risk culture
Risk evaluation	Frequent risk evaluation to identify new, changing forms of risk, within the context of the risk appetite
Risk quantification and aggregation	Regular quantification and aggregation of the risks allowing the management to focus risk priorities and control
Monitoring and reporting	Monitoring and reporting risk control performance on the basis of the limits set by the risk appetite
Risk and control optimization	Control calibrated according to the risk appetite in order to optimize the cost-benefit ratio

A well-defined risk appetite must have the following characteristics:

- It must reflect the banking strategy, goals, the business plans and stakeholders, shareholders expectations;
- It must reflect key aspects of the banking activity;
- It must state and accept the willingness and capacity to assume risks;
- It must materialise in an official statement regarding the risk appetite;

- It must take into consideration the means, resources and technology required for risk exposure management and monitoring within the context of the risk appetite;
- It must accept losses and adverse events that may be quantified reasonably;
- It must be periodically reviewed and reconsidered depending on the evolution of the financial and economic environment;
- The statement must be approved by the bank top leadership.

The analysis of the risk appetite statement frequently uses the following criteria: earnings volatility; economic capital requirements; reputation; credits or foreign debts rating; stability of the regulations and norms.

The development of an adequate and reasonable risk appetite statement claims a concentric vision relying on the understanding and articulation of the components. This vision comes from the interlocking of the following four components:

- Strategic goals of the bank;
- Harmonization of the risk profile with the business plans and with capital management plans;
- Determination of the risk thresholds;
- Formalization and approval of the risk appetite declaration.

A risk appetite at the bank level materializes, as mentioned before, in a resolute statement (commitment) which offers the programmatic direction of risk assuming by the bank. However, if the statement is not followed by actual action, the commitment remains a mere idea.

The problem is thus, the way in which the bank gets involved in order to develop this statement, the way in which it is transformed in a **guide of action for the bank**.

The following stages must be taken into consideration when implementing the risk appetite commitment (the exemplifications are done for the bank relations with the clients):

1. **Translation of the risk appetite to the process level.** On a daily basis, the managers of the executive compartments take operational risks decisions, detached from the bank risk appetite policies; this happens when the income generated by the interaction of the bank staff with clients, as well as the emerging duties, are most visible. The successful implementation of the risk appetite presumes the identification and determination of the risk tolerance at the

operational level and at the level of the process managers, which allows connecting the operational decisions to the global risk appetite and determining the processes outside the interval.

**2. Deciding and measuring the risk tolerance associated to the main problems, causes.** The determination of the risk tolerance associated to the operative processes within the bank is not enough to really activate the risk appetite; the main causes at this level must be monitored.

Supposing that the risk appetite gets a low tolerance for client dissatisfaction, a goal might be to increase the satisfaction of an individual client. However, this measurement provides no solution to improve customer services; the deep, underlying causes of client dissatisfaction, measured by indicators, must be revealed: waiting time after a call, time of response to e-mails, number of cases. These measurements act when the set tolerance is exceeded.

**3. Risk measurement must be oriented towards the future.** It is not enough to make surveys among the clients, to compile their answers regarding risks and to analyse the aggregate results just to be able to take a decision – people often act on the basis of the last month impressions of the clients, or as effect of the last year policies. On the other hand, the metric measurement of the risk must look forward, so that, taking as example the number of risky cases from the customer department, one may detect the emergent trends much before they actually affect significantly the bank.

**4. Standardization of the risk measurements at the bank level.** The underlying metrics of risk measurement must be comparable in time, at different levels and at different categories of risk tolerance, with the purpose to be significant.

The measurement of client services might evaluate the deep underlying causes of the risk, but will not provide comparisons in time or by product, if the total number of clients changes. On the other hand the evaluation by the proportion of cases might be more significant because it depends on the volume of customers and thus, comparable both in time and on categories of risk tolerance.

**5. Adjustment of the risk tolerance to the strategic goals and to bank specificity.** The risk tolerance develops naturally from the global risk appetite, but it must also be in agreement with bank objectives and they may define a very low risk tolerance regarding client dissatisfaction. However, if drawing new clients incurs high

costs, such policy is not in line with the discount pattern used by the bank. When the risk tolerance fits the global risk appetite and the strategic goals, they will improve the efficiency of risk reduction and will contribute to the accomplishment of the strategic goals.

Therefore, a proper bank evaluation presumes setting risk tolerances and managing the global risk appetite. Thus, the evaluation must be placed within the broader framework of the risk management in banking (RMB), a particular case of enterprise risk management (ERM). The **main attributes of the risk management in banking** must be taken into consideration:

- Approaching risk management at the bank level, attribute which presumes measuring the level of RMB support, the integration of all processes and products, risk communication towards the bank compartments;
- Measuring the level of RMB adoption and the way in which RMB program follows the steps of risk identification, estimation, measurement, decrease and monitoring;
- Risk appetite measurement, which evaluates the way in which the bank understands and balances the relation between the risk and reward; this includes risk accountability, defining the adequate risk tolerances, removing the gap between the perceived and actual risk;
- Classifying the essential causes, which shows how much does a bank relates a risk to its essential cause, to the source of the process, which identifies the deeper causes rather than eliminates the symptoms of risk, easing risk estimation and simplifying the work;
- Showing the uncovered risks, attribute which measures the quality of risk coverage, which examines the quality of information and whether risk dependency and correlations can remain uncovered by these information;
- Performance management, attribute which determines how much the bank applies its vision and strategy taking into consideration the level of plans incertitude and the activities and data which biased from the expectations.

In conclusion, the bank's governance is currently confronted with an outstanding challenge in enforcing its risk management responsibilities. The risk appetite is an essential concept but it lacks a consistent definition among the banks or regulatory bodies, which requires an adequate level of technical competence, wisdom and

judgement. Understanding the risk appetite will only be possible when the risk at the bank level will be seen within the context of the potential profit and of the capital requirements; the perspectives of the banking business will be aggregated within an image (portfolio) of the banking strategy, a consistent approach of the risk appetite. This is equivalent with approaching the banking strategy and the entire top management of the bank must be involved.

The risk appetite is an evolving concept which requires a continuous research effort. While currently the statement of the risk appetite by the banks improves, the risk managers are still deterred because they sway between various risks, strategic objectives and business plans, although it is obvious that this path is wrong.

Although the concept is not yet clear, the risk appetite is a useful risk management instrument for the bank as a whole.

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### Web resources:

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