NEW CHALLENGES OF RISK MANAGEMENT IN BANKS IN THE GLOBALISATION CONTEXT

Cătălin SABĂU
Phd.Student,”Babes-Bolyai” University, e-mail:cata_sab@yahoo.com

Abstract
This paper aims to address the growing need for new standards in the management of two major risks financial entities face - credit risk and liquidity risk, in the context of this phenomenon extremely large and complex called globalization, by identifying risks, analyzing them and presenting their management techniques.

Taking into account the fact that the banking system plays a crucial role in any national economy as a central pillar in its functions: lending the real economy and acting as a payment system-base regulation and prudential supervision of the banking system is the main component and also a prerequisite for ensuring and maintaining the financial and economic health of a country. Regardless of the approach, credit risk is the main cause of bank failures and from here the need for the imposition of minimum requirements in managing credit risk and also liquidity risk is seen as the risk of disruptions in providing liquid funds of the bank.

The ultimate goal of this paper is to minimize the consequences arising from the banks activity or at least allow it to absorb only the optimal amount of this type of risk.

Key words: globalization, credit risk, liquidity risk, management techniques, risk exposure, capital markets.

JEL Classification: M40, M41, G21

Globalization --- definitions, factors, characteristics

This paper aims to address the growing need for new standards in the management of two major risks financial entities face - credit risk and liquidity risk, in the context of this phenomenon extremely large and complex called globalization. Globalization is a subject of debate extremely challenging, stimulating and timely, and from a comprehensive point of view, about this phenomenon we can not say much definitive facts because of the multitude of uncertainties both in the system and between researchers in the field. Complex and lengthy debates were and are still held on the implications of such a complex, regarding the beneficial and negative effects that it can have on economies, especially those which are underdeveloped and the emergent economies.

According to George Soros, he requires balance and foresight in judging such an extraordinarily complex process, which has negative facets, whose ignorance would be irresponsible. And the focus of his analysis is on the functioning of capital markets, causing more instability, insecurity and may annihilate the lives of many citizens- in poor countries (”peripheral”), but also in rich countries. [9]

In order to have a clearer picture of the implications such a process involves we must first be able to define it. In technical literature there have been given several definitions regarding globalization, which is why there is not a definition of globalization in a form universally accepted and perhaps neither final. The reason is that globalization subincludes a multitude of complex processes with dynamic variable influencing different areas of a society. It can be a phenomenon, an ideology, a strategy, or all together.

Globalization is the modern term used to describe the changes in societies and the world economy, resulting in highly increased international trade and cultural exchanges. It describes growth due to increasing trade and the removal of investment barriers and interdependence between states. In the economic context, it is almost exclusively reffered to the effects of trade and, in particular, trade liberalization or free trade. Many specialists who analyze globalization bring into focus the global market, which they identify as the dominant and unifying factor. Thus, Livsey defines globalization as ”the tendency of firms to establish their production units around the world, wherever the market is large enough to allow economies of scale. This leads to increase in number and size of multinational enterprises. The main feature of globalization is that goods, services, capital, labor and ideas are transferred internationally through companies.” [5]

The globalization process is based on a series of economic, social, political and technical factors, acting in tandem and internationally, regionally and internationally. Thus, one of the most important factor, namely, the political-economic one, has given rise to globalisation through practical measures such as free movement of goods (1948-establishment of the OEEC primarily aimed at liberalizing trade between countries), liberalization of capital markets, freedom to
establish companies by foreign investors, liberalization of services, other legislative and administrative factors in favor of globalization. Linked to this major factor is the technical factor; by reducing the cost of transport, telecommunications, improving information and communication networks, a significant increase in spending on research and development and reduction of production cycles, the advancement of technology has contributed significantly to the expansion of multi-process globalization worldwide. On capital markets worldwide globalization took a financial form and manifested itself by increasing private capital flows into developing countries, increasing competition in international financial markets, scale and high intensity of transactions, networks and contemporary global financial flows, explosive development of global financial activities, complexity and speed of transactions and financial flows, geographic expansion of global financial markets and international finance system extension, expansion of financial conglomerates, relatively high volatility of exchange rates, interest rates and prices of other financial assets.[11]

The influence of globalization on financial system

The trend towards a stronger globalisation of financial institutions is in close connection with other structural changes in the financial sector. Besides the high degree of openness of national economies to financial intermediaries, deregulation facilitated the merging of conglomerates into a single organization capable of providing multiple services, banking, securities and insurance, as mergers and acquisitions operations contributing in an essential manner to strengthening the financial industry. All these developments have led to the creation of large institutions with a clearer international scope, operating in multiple sectors, depending mainly on international markets as sources of funds, entities that are known in technical literature as “large complex financial institutions”. (LCFIs) [11]

The role of banks is essential in contemporary economic life. This role can be analyzed, first by using the concept of intermediation between borrowers and the lender agents in the economy, and secondly, the traditional functions of funding, collection of deposits and managing means of payment. Moreover, banks are considered by many authors the focus of financial intermediation due to their role in the management of payment systems and monetary policy transmission mechanism. But the changing environment, in which banks operate, generates new business opportunities, but they also imply increasing and more complex risks and this, in turn, represents a challenge as real as it is threatening to traditional approaches in bank management. Taking into account the great importance the banking sector represents for any national economy - the vital functions it performs, ie the payment system, credit system for real economy or a channel for national monetary policy transmission - prudential regulation and supervision on the basis of the main components of the banking system is a must and also a prerequisite for ensuring and maintaining the financial and economic health of a country. [11]

Neoliberalism excessively practiced in the banking sector at the end of the last decade in most countries of today's European Union confirms the negative effects that the lack of proper regulation can generate and induce the banking system. Thus the chain of bankruptcies triggered throughout the European banking and financial institutions had consequences, not only nationally, but spread rapidly in Europe, due to the interdependencies between the various European financial systems (effect known as “domino effect”). The direct consequences of this phenomenon were found to decrease the population and economic actors’ confidence in banking systems thus perpetuating in the long term, this crisis. [11]

Recognizing the great importance in establishing a solid and transparent legal framework may have on the confidence in the banking system, international authorities with prudent banking supervisory ambitions, submitted in June 1999 new proposals to improve regulations for Basel I. The new provisions gave increased attention to the need to determine the appropriate level of capitalization of financial institutions as a function of the aggregate level of risk to which they are exposed in the conduct of their activities. However, these regulations therefore equally lay the foundations for a convergence in prudential supervision to ensure a transparent and competitive setting for all banks operating internationally. The ultimate goal was to eventually improve bank risk management policies and adapt them to the realities of the financial world, characterized by a high degree of uncertainty and great volatility of capital flows.[11]

Banks' exposure to risks

Banks' exposure to risk is inevitable, being daily exposed to different types of risk, especially financial ones, for which reason it is obligated to adopt and develop specific methods to identify, assess, quantify and control risk. Bank risk management is considered, in the context of modern management, a relatively new field, which is booming, that is why new techniques are continuously discovered and applied, while others become obsolete and out of the area of interest. For this reason commercial banks, because they provide services and specific products to different partners in the economy and banking industry, objectively assume certain risks. However, it is wrong to understand that the bank automatically assumes all risks arising from the performance of its operations. In some cases, such as brokering financial transactions, the bank will transfer the whole or part of the risk to its
business partners. Therefore, in a first context, of great importance to management is the identification of risk categories a bank is willing to assume. [11]

In the last decade banks have proven to be base actors of the financial system. The great importance attributed to banks is due, first of all, to the highly diversified range of banking products and services that they offer to their customers, from market research and continued effective financial transactions and special financing capacity. Such transactions involve the bank as part of the transaction, and therefore, the risks associated with such services will be reflected in the required bank balance.

In other cases, however, the bank acts only as an intermediary agent or as a consultant. In this type of operation are included: the mediation of public and private investments, capital investment management, distribution, security and providing consumer credit debt service or estate credit etc. In such situations, because the risks fall rather under standard accounting procedures, they will not be recorded in the bank's balance sheet. Practice proves that the most common risk assumed by a bank continues to be reflected in the balance sheet. Therefore, bank management attention will be focused mainly on the identification, assessment, measurement, analysis and control of this risk category.

It is worth noting the fact that between banks, there are notable differences in the risk management system implemented, the system becoming more sophisticated and more powerful as the bank increases its power and prestige. Although it is considered to be quite expensive, the implementation of efficient risk management is essential, because the systems become more efficient, banks losses can be better identified, measured and controlled, as they continually diminish and the bank can meet certain basic organizational objectives, such as: increasing competition, maximizing profits, increasing its market value. [11]

With the expansion of national and international traditional credit, financial markets became more fragile, uncertainty increased; all backed by multiplying the specific risks of the banking system. Experience has shown that a large part of the main problems facing the banks are due to heightened risks. This is explained by the fact that the future evolution of asset value and the cost of liabilities can not be predicted accurately, it depends on factors such as inflation, monetary policy, changes in the structure of gross national product. There is a set of operations and procedures generating credit risk.

In addition, banks must face some risks that are not specific. Besides, regarding risk related to banks, we have to accept that it derives from each transaction taken in hand, is associated with any process generated by the bank that most banking transactions give rise to a combination of risks and therefore a major goal of management in banks will be the management of systemic risk. In other cases, however, the bank acts only as an intermediary agent or as a consultant. In this type of operation are included: the mediation of public and private investments, capital investment management, distribution, security and providing consumer credit debt service or estate credit etc. In such situations, because the risks fall rather under standard accounting procedures, they will not be recorded in the bank's balance sheet.[11]

Practice proves that the most common risks assumed by a bank continue to be reflected in the balance sheet. Therefore, bank management attention will be focused mainly on the identification, assessment, measurement, analysis and control of this risk category. Experience in the field shows that the bank usually takes only those types of risks likely to affect the elements of its balance sheet. However, none of these risks are borne entirely by commercial banks. Any bank will either try to eliminate or at least reduce the financial risks to which it is subject, by resorting to specific ways of protection against risk or to transfer it to the business partners through contractual clauses relating to pricing and type of financial products offered to its clients. [11]

As proven by banking practice, such an institution will assume only those risks that, management and control systems used, can manage more efficiently than the financial market or its direct partners could. This approach is found in studies by other specialists in the field. In their view, the risks equally affecting all financial institutions can be divided in terms of management systems implemented by their management into three broad categories, namely:

- Risks that can be eliminated or avoided through commercial practices;
- Risks that can be transferred to other participants;
- Risks that must be actively managed by the bank.

In the first category, the simplest way to avoid the risk seems to be to eliminate those risks which are not directly connected to the activity of non bank institutions. In this way it reduces some of the potential losses associated with the event due to the manifestation of risk. The most commonly used ways of avoiding risks are:

- standardization of processes, contracts and procedures to prevent inefficient decision making;
- diversifying the client portfolio that will generate a reduction in the probability of event risk on a portfolio basis;
- designing and implementing incentive systems for the management institution or through granting incentives or through accountability if risks appear.
The main goal would be to ultimately minimize the consequences that manifest from risks arising from work carried out by the bank or at least allow it to absorb only the optimal amount of this type of risk. In the second category, the risks can be reduced or even eliminated by the technique of their transfer to other partners. It should be noted that such transfers are usually achieved through derivatives such as interest rate risk transfer by using the CDS.

The third category of risks requires another bank risk management technique that consists of its active management. There are at least two situations when the best way of bank risk management seems to be the bank's financial resources ability to absorb the effects associated with the risks to which it is subject.

The first situation would be one in which financial assets and some of the bank's activities are subject to complex risks and difficulty in communicating with third parties. It may be the case of a bank that has complex fixed assets in its portfolio, but for which there is not a liquid market that would allow a normal and immediate recovery of such property.

The second situation involves risks associated with bank loans, being accepted as it is naturally the very raison d'être of the bank. A good example in this matter is credit risk, which is inherent in any activities conducted by a bank. In either case, the bank will have to assume all the risk, to monitor and manage it effectively.

A systematic approach to the main risk categories specific to banking requires classification. In the economic literature there are several versions of bank risk classification and the financial world today, strong and highly integrated, causes banks to face a number of complex risks and closely related to each other:

- Credit risk is the risk that one party does not live up to their position;
- Market risk involves loss due to unexpected changes and general market rates or interest rates;
- Operational risk loss due to human errors, fraudulent acts or absence of internal controls;
- Legal risk is the risk arising from the legal regime applicable to a contract;
- Liquidity risk, the risk that a particular position can not be sold quickly and without losses, in terms of price;
- Regulatory risk includes exposure to market risk and credit payment period;
- Specific risk lowering the value of a position, drop unrelated to the overall trend of the market.

Specific international transactions require banks to behave differently, risks assumed and methods used vary from one type of transactions to another.

In the banking industry, the issue of risk management has been seen most often in terms of the need to control four major categories of risks to which banks are considered to be vulnerable, namely: credit risk, the interest rate, the exchange and the liquidity. The risk associated with business partners and the risk of legal regulation are seen as less relevant and as often subordinated credit risk, which is why their evaluation using standard procedures for the management of credit risk. Therefore, bank risk management followed in principle how the four basic banking risks are managed and on top of that, how effective procedures are applied.

Management procedures of credit risk

The concept of risk is most often associated with the uncertainty characterizing any future assessment of financial assets. In other words, the banking risks are not the result of changes in estimates of the value of these assets, on the contrary, they are determined by the dispersion of the values around the average value of the expected financial securities.

Today there are known many credit risk management techniques, based on the traditional techniques of exposure assessment, destined to limit excessive concentration at a borrower level, sector, industry and so on, to new management techniques, such as swaps and options transactions tailored to this type of risk. These are the basic management tools that allow portfolio managers to formulate, adopt and implement effective policies for management of credit risk by knowing the said potential credit risk. Therefore, credit risk - defined as the probability that the borrower or buyer of the financial instrument is not capable of paying interest or repayment at maturity - is an inherent part of banking. [11]

Thus, credit risk means late repayment or the impossibility of repayment, which can generate problems of cash flow or affect bank liquidity.

In another perspective, credit risk represents the potential loss suffered by an operator due to possible changes in the credit quality of one or more of its business partners, knowing a certain confidence interval and time horizon...
This is reflected in the calculation of quantiles (to a limit), which under normal conditions (reproducing conditions in the past to present) is not exceeded except in a very small number of cases. Regardless of which definition is given credit risk is the main cause of bank failures, which is why the imposition of minimum requirements for credit risk management. The starting point of credit risk management is to identify existing and potential risks inherent in lending. Credit risk is found in practice in two basic forms, namely:

- The risk of default (bankruptcy). The first form is associated with the emergence and manifestation of the impossibility of the debtor (business partner) to meet payment obligations on time.

- Risk of the business partner’s worsening financial standing (downgrade factor)

The difference between default risk and the downgrade of an issuer of debt securities consists mainly in the assessment of the maximum loss associated with each of these risks. While the default risk uses the accounting value to calculate potential losses, the migration of the rating risk uses for calculating the same losses the marking to market, developing various scenarios for migrating to any risk class. Typically, the indicator of risk is calculated generically by the formula:

\[ I_r = \frac{A_{pc}}{Var} \]  \hspace{1cm} (1)

in which:
- \( I_r \) - indicator of risk;
- \( A_{pc} \) - adjusted primary capital;
- \( Var \) - the value of risky assets.

Based on these calculations results a risk indicator for which there are different gradations of framing and by which one can assess the level of risk the bank will face in its activity. The risk analysis must be completed and in terms of the placement of the bank unit in the international banking system. Risk management is the planning function of the risk position of the bank and active risk management is based on this schedule. [11] Management means limiting the risk position and possible reduction or increase of these limits using appropriate financial instruments or techniques. These tools and techniques are aimed at individual risk and portfolio risk. The most widely used management tools are:

- Individual credit assessment measured with the corresponding risk
- Establishing exposure limits for the credit portfolio or the individual position
- Use of guarantees, credit derivatives and insurance
- Securitization risk
- Purchase and sale of assets

Risk monitoring is used to check whether risks are within the limits expected, thus ensuring the institution's ability to bear these risks. Such is the measured effectiveness of the implemented risk control and new measures may be applied if necessary. Traditional methods focus on estimating the probability of failure (probability of default (PD)), the determination of potential losses in case of bankruptcy (LGD - loss given default). They focus on bankruptcy, default or liquidation, ignoring credit quality migration which is measured by the models on the market. [11] We consider three categories of traditional models using estimates of probability of bankruptcy (PD):

- Expert systems
- Rating systems
- Credit scoring models.

Expert systems: banks use the 5 C (character, capital, capacity, collateral, conditions cycle) expert systems to determine credit quality. These systems do not specify the corresponding components used in the schemes of the 5 C in predicting the possibility of default.
Credit rating systems divide credits in the following categories: other activities in particular, substandard, doubtful, loss. Many banks have implemented internal rating systems in preparation for the New Basel Capital Accord.

One of the traditional methods used to measure credit risk is the multiple discriminant analysis of credit scoring. There are 4 forms of multivariate credit scoring models:

1. linear probability model
2. logit model
3. probit model
4. multiple discriminant analysis model.

These models identify financial variables which have explanatory power statistical differentiation of the non-bankrupt companies from the ones that are bankrupt. Credit scoring models are relatively inexpensive to implement and are not subjective. Most studies consider the probabilities determined by the rate of financial leverage capital and liquidity have the statistical power to differentiate the non-bankrupt companies from the bankrupt. The limits of the credit scoring models are lack of data and the linearity assumption.[11]

**Liquidity risk. Importance. Management Techniques**

Risk is the danger of suffering a loss, said Terry Lopez, at a conference on Risk Management held in the Bank of Luxembourg in 1996. Risk management as a process, considers factors, measurable or not, threatening or influencing a company's objectives, including banks and provides strategic solutions (organization, business policy, procedures, internal controls, etc.) and operational to oppose as much as possible the impact of these factors.[11]

Liquidity is the ability of assets managed by a company to turn quickly and with a minimum expenditure possible in coin, ie immediate liquidity (cash or availability in the account).

Banking practice uses two distinct concepts often to define liquidity risk as follows:

- In a first approach, the class of liquidity risk is seen as the risk of disruptions in the provision of liquid funds of the bank. In this approach, risk analysis focuses on liquidity as needed to facilitate the development of bank resources and to be able to cover some unexpected increases, an unforeseen bank asset. In such a context, the management relies exclusively on: a). - Liquidity ratios, b). - Contracting credit lines from third party partners.[11]

- A second approach, from our point of view as fair, considered a modern one sees the bank liquidity risk as determined by the need for immediate liquidity required to honor the obligations become due, especially the emerging need in a major crisis. In this case the bank management is mainly based on: a). - Analyze and solve problems arising from the "worst case" scenarios b). - Establishing additional sources of funds that the bank has available and their cost. [11]

Liquidity risk can be expressed in the formula:

\[
R_L = \frac{N + D_{vb}}{D_v} \times 100
\]

in which:

- \( R_L \) - liquidity risk;
- \( N \) - total cash;
- \( D_{vb} \) - existing demand deposits with other banks;
- \( D_v \) - deposits.

Another facet of liquidity risk in banks is the need for funds in times of crisis, widespread in the banking system. In this approach, management procedures are different from those presented above. Liquidity ratios and liquidity management position, which are standard approaches in the first case, are less relevant in this second scenario. In the latter case analyses of needs for funds that could occur with "worst case" scenarios are determined. Such scenarios include banking specific shocks such as severe loss of the entire banking system crisis. A bank crisis is perceived as having a negative effect on the economy more than any other type of business crisis since the domino effect in the banking system is considered more likely. In each of the cases simulated, the bank must examine the extent to which one can cope with such crises and to estimate the time interval during which the crisis will lead to a general crisis of funds. [11]

Other banks are trying to measure the time interval in which the assets can be liquidated to meet such a crisis,
using this time reports indicating the speed at which the bank can provide immediate liquidity. The policy response in cases of crisis includes estimates and the degree to which the balance will be affected in terms of sources of funds that remain available in case of crisis. The result of these simulations is expressed in days of exposure or short of funds. Studies of this type are by their nature imprecise, but useful to streamline operations in cases of crisis. Consequently most of the EU banking regulators require from subordinate banks to develop and implement, if appropriate, the liquidity plans. The development of these plans and accurate estimates of vulnerability in liquidity crises still vary greatly from one bank to another. Some banks see these plans only as a requirement in addition to supervisors, while others consider them really useful.[11]

The purpose of a bank's liquidity policy is to ensure a constant potential to fulfill obligations to customers: the obligations of payment and credit, and any other requirement of cash. Are taken into account at least the following technical aspects:

1. Cash Flow
Under normal circumstances, a bank can cover daily needs through its own funds. But it must forsee which deposit will be liquidated, what credits will be awarded. Funding from corporate clients is easy to predict, because their loans will be for a fixed period. Whereas funds provided by small and medium customers often do not have a fixed maturity, their analysis making it possible to predict a trend, but not certain, sure, taking into account seasonal trends and situations.
Banks may consider the possibility of increasing funds by selling securities on the market, but only with caution, because they can not sell more than market demand.

2. Lending capacity
Given a stable interbank market, interbank lending operations are commonly practiced. A bank can increase the amount of funds obtained through regular loans from another bank and can afford a negative flux due to its own operations, as it may provide liquidity due to the existence of this market. At the same time it is important for banks not to treat this as if their lending has an unlimited capacity. A planning of the volume of loans that can be granted is still required.[11]

3. The volume of capital
Cash flow planning is only possible under a normal economy, but it is wise to build a general policy of liquidity assuming these conditions as permanent. It is absolutely necessary to create sources of funds for special situations, emergency (when funds flow projections prove wrong or when calling in loans from other banks becomes difficult). This source is provided by a reserve stock of high quality liquid assets - in fact guarantees that can be sold on the interbank market, even in extreme conditions. This category includes: government securities, certificates of deposit issued by leading international banks or any other values which the central bank considers them as collateral for short-term loans.[11]

4. Composite Currencies
Attention should be paid to foreign currencies that cash is kept. If a bank performs its own operations in multiple currencies, it is wise to keep liquid assets in each currency it operates, thus ensuring sufficient quality assets and greater immunity to foreign exchange risk.

By adopting a policy of its own regarding liquidity, each bank has not only to survive a crisis, but also prevent one. Liquidity policy objectives must cover both direct monetary control and preventive control.
Preventive control is a real concern for any bank and is essential in this context to show prudence and intelligence in bank management, even if it requires a more conservative tactic than the central banks, for instance.
Liquidity risk management is based in a decisive way on the so-called continuous management of liquidity, which in turn necessarily requires the establishment of a banking strategy by which to ensure close supervision by the executive management and Board of Directors, as well as a process for measuring, monitoring and controlling liquidity risk effectively. The core business of banks is to create liquidity because many other banking activities depend directly or indirectly on the ability of the bank to provide liquidity to its clients. Due to these issues, banks are obliged to take account of the strategy, methods and their management on liquidity.
A bank must have a management structure to accomplish effective liquidity banking strategy, programs and processes liquidity. Banks should designate the highest level of management responsibility to establish liquidity and program reviewing decisions on liquidity.[11]
An important aspect of liquidity management is hypothesizing about future funding needs. Banks must issue assumptions about future liquidity needs, both short term and long periods.
In conclusion, we can say that there are guiding principles for liquidity management, but very few rules are universal in character, being able to talk rather about a minimum or maximum in standards aimed at preventing negative effects of a risk, liquidity implicitly.
If the quality of a bank's reputation decreases, its stock reserve or working capital volume should increase. One should always take into account the bank's position in the banking system and the capital market which it operates, and the structure of the money market and the place occupied by mass bank loan.

Conclusions

Globalization and its associated mutations have transformed financial systems by strengthening the link between banks and financial markets. Through the allocation of capital, the market has gained considerable importance. However, the development of financial markets occurred in parallel with the development of financial intermediaries, especially banks. The complementary relationship between capital markets and financial intermediaries strengthened considerably.

The big banks are the main actors of financial globalization. Big banks sell a wide range of products and services worldwide through various communication channels and high flow, thus becoming active actors of global economic interdependence. They stimulate and promote the establishment of an international system that tends to unify the rules, values and objectives.[11]

Nowadays in Europe the techniques of assessment and risk management are booming, they are used increasingly more in efficient management of credit institutions in order to respond effectively to questions raised by this type of risk arising and amplified by the intense changes that have occurred both in finance and in the institutions. The main goal would be to ultimately minimize the consequences of risks arising from work carried out by the bank or at least allow it to absorb only the optimal amount of this type of risk.

REFERENCES

[8]. D. Shimko, Credit Risk Models and Management. Risk Books, 2004