“Risks management of financial supermarkets”

AUTHORS	Inna Shkolnyk https://orcid.org/0000-0002-5359-0521 http://www.researcherid.com/rid/I-7368-2018

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Inna Shkolnyk (Ukraine)

Risk management of financial supermarkets

Abstract

The present article investigates the peculiarities of financial supermarkets development. Lately international financial architecture has experienced changes conditioned by the process of convergence of activity in the financial market such intermediaries as banks, insurance companies, private pension funds, institutions of general investments forming powerful financial conglomerates named financial supermarkets. The same tendency is observed in Ukraine. In the paper the main advantages and disadvantages of functioning the said universal types of organizations are determined. It was proved that one of the main problems of financial supermarkets functioning were risks of different types due to the activity of organization departments directed to the different segments of financial market in the supermarket structure. In the given investigation financial supermarkets are classified. Necessity of risk-management establishment in such companies is determined due to the new standards of "International convergence of the capital assessment and standards: new approaches" known as "Basel II". The basic steps of financial supermarket risk management are examined depending on the chosen model – British or American. There were analyzed the peculiarities of integrated system of risk management based on using quantitative evaluation of risks by the risk indices. It was determined that reliable estimates of expected financial risks can be received by combining historic mathematic evaluations with current evaluation index of financial risks.

Keywords: financial market, financial intermediaries, banks, non-banking financial institutions, financial supermarkets, financial risk.
JEL Classification: G2, G21, G22, G23, G24.

Introduction

The necessary condition for reaching the relevant level of development of banks and financial institutions is their improvement on the basis of forming competitive relations between the financial market participants. Moreover, there must be competition not only between banks as members of money market and banking institutions as members of the capital market but also between banks and financial institutions, as the mentioned financial market participants carry out a number of similar functions. There exists a necessity to attract financial resources at minimal price to provide the maximal profit. Along with increasing competence for investment resources there appears another tendency, which can be defined as convergence (interpenetration) of activities of banks and financial institutions.

On the one hand, banking system and financial institutions are competitors but on the other hand they converge and acquire common traits of their activities. In times of modern financial market development two main tendencies are forming. First, the banking system development promotes the capital market growth limiting own investment activities, and, second, the capital market development helps the extension of banking abilities for involvement of investments but at the same time it restricts the perspectives of the credit activity leading to reduction of credit rates.

The high level of competition leads to changes in financial intermediaries' structure: from banks and financial institutions they turn into integrated powerful financial intermediaries, i.e. financial conglomerates. Considerable attention is paid to the role of banks and financial institutions in the process of financial market development. As for integrated financial intermediaries investigating their role and meaning, especially in the national financial market they are at the initial stage. Such scientists as Beck T., Demirguc-Kunt A., Levine R. (1999), Herrmann S., Jochem A. (2003), Amel D., Barnes C., Panetta F., Salleo C. (2004), as well as Partin H., Tyvonchuk O. (2005), Vlasenova Y. (2007) dedicated their works to the investigation of this problem. Companies, which are the part of conglomerate, have mutual financial obligations; hence, they are put to risk, not characteristic to their specific business sector. Commercial bank, for example, taking part in the capital of insurance company is risks affected (Zamansky H., 2006; Lylyk O., 2007). When a bank has mutual obligations with investments department of a conglomerate functioning in the capital market, it becomes dependent on every risky operation. Experience shows that problems arising in one part of conglomerate can influence the group of other companies affiliated in the same conglomerate. The risk substantially grows in case of security trading companies, banks or companies specialized in venture investments. Problems that one company can face in case of financial difficulties of other group participants can be intensified when the letter have financial obligations to this company. There arises such situation when money belonging to company is not returned in time and in order to reduce the financial risk a company must possess additional financial resources to stabilize the activity of the whole conglomerate. That's why the risk assessment and risk management

in terms of financial supermarket are of great importance. Nowadays this problem has become topical and a serious attention is paid by national and foreign scientists, namely Linsmeier T., Pearson D. (1996), Manfredo M., Leuthold R. (2001), Kevin Bühler, Gunnar Pritch (2003), Jorion P. (2005), Khokhlov Y. (2006), Bautov A. (2007), Fedotov D. (2007).

1. Methodology

Lately in the world market there has been formed a tendency towards convergence of financial intermediaries' activity. As a result of investigation the same tendency but on its initial stage was found in Ukraine. There were formed financial supermarkets by the American and British models with their own peculiarities of risks.

Then the risks threatening companies with features of financial supermarkets were classified as: market risk, operational risk, business scale risk, and financial risk. As the said types of risk can threaten activity of financial supermarket in general as well as its organization departments in particular it is necessary to initiate an integrated system of risk management.

By combining historic mathematic evaluations with current indicators of financial risks assessment we can get the most reliable estimates of expected financial risks.

2. Results of investigation

2.1. Risk forming based on the chosen model of financial supermarket. Development of different models of financial supermarket (American or British) promotes competitive growth of financial intermediaries due to the following factors: 1) a wider variety of products adapted to clients demands. The results of investigation of American banks association show the 50% rate of holding clients while opening a current bank account, 66% while placing money on deposit, 94% – opening current account, placing money on deposits and obtaining a credit, 99% – opening current account, placing money on deposits and receiving insurance services (Lylyk O., 2007). 2) Optimization of business processes, administration of bank and its partners, insurance agencies, leasing companies, investment companies and other financial institutions. 3) Ability to create an integrated product taking in consideration clients demands. 4) Reduction of expenses due to cost saving of transactions among partners, which leads to cheapening of pricing policy and forms a higher competitive level of financial supermarket. 5) Creating integrated informational systems, this reduces risks of financial intermediaries' activity and, thus, promotes a competitive growth. 6) Synergistic effect promotes competitiveness as a result of uniting different financial companies.

One or several companies of conglomerate working in such way can become participants of rather risky markets and depend on one another, which will threaten the whole group or conglomerate as a whole.

So, universal organizational type has its own drawbacks, to which too little attention is paid nowadays, as in fact there is no single approach to regulate activity of every financial institution – banks are controlled by the National Bank of Ukraine, investment companies are regulated by the State Committee for Securities and stock market, private pension funds, insurance agencies, leasing companies – State Committee regulating financial services. In developed countries there has aroused a problem of right and adequate regulation of financial conglomerates activity, in most cases conditioned by lack of the single control authority.

A lot of conglomerates can include enterprises not being the objects of regulation by governmental control authorities. Some of these "unregulated" enterprises can be involved in non-financial sector, others, on the contrary, actively operate or are closely connected with actively working companies. These "unregulated" companies can't be regulated by control authorities and it is impossible to determine the level of their impact upon the group.

Financial conglomerates have more chances to face financial problems if they lack capital to uphold activity risks at considerably low level. At this stage one more problem appears, which in the practice of Western countries got the name of "dual accounting" of capital inside group of companies that are the members of conglomerate. Such "dual accounting" can be seen in directing own or other types of capital from the central office company to its organization departments. Risk is at its highest level when there exist subunits in the structure of financial conglomerate not regulated by control authorities of the financial market. In general the term "dual accounting" of capital can be understood as accounting the same elements of capital while estimating its sufficiency, which leads to growth of group capital as a whole, hence, inconsistency of its amount and summarized claims to conglomerate's financial stability. In European practice control authorities worked out methods preventing the appearance of such events. As a result of their application new requirements are formed concerning capital size and structure of companies-members of the group. For each separate company as well as the whole group it is advisable to possess supplementary capital to back up paying capacity for preventing all kinds of risks that appear as a result of capital dissolution inside a group.

Therefore, to account all correlations appearing inside a conglomerate it is essential to examine a group of companies as a single unit, i.e. on a permanent basis, which will increase financial stability of the whole group as a single unit functioning from position of the general purposes.

The problem is aggravated by the fact that financial conglomerates are reluctant to inform about the inner structure of their capital. In most cases it is difficult to investigate inner correlations between companies-members of a group because of the complicated structure of these correlations and sometimes groups intentionally hold back information from control authorities looking after own commercial interests.

In the course of formation of financial management of financial supermarkets it is necessary to create the complex approach towards risk management. In our view, the level of risk and its influence on financial status of company owners and its counterparties are determined greatly by choosing a model (American or British). In the American model risk of running a financial supermarket will considerably influence owners' capital as independent financial institutions (banks and non-banking financial institutions) that are independent legal units are incorporated in a financial group. If risks of a separate structural organizational unit of conglomerate are fully validated they are related to a separate business unit and capital losses of the owners of this conglomerate and its counterparties that directly cooperate with a given structural unit.

As for the British model risky activity of a separate business unit directly influences the activity of other units as well as functioning of all counterparties. In such case it means the direct demonstration of financial leverage in terms of functioning the whole conglomerate because there is a direct correlation of capital structure of every separate structural unit with other organization departments of financial supermarket.

2.2. Risk classification of financial supermarket. In present conditions the main types of risks emerging in the process of financial supermarkets activity are market risk, operational risk, financial risk and business scale risk (Fig. 1).

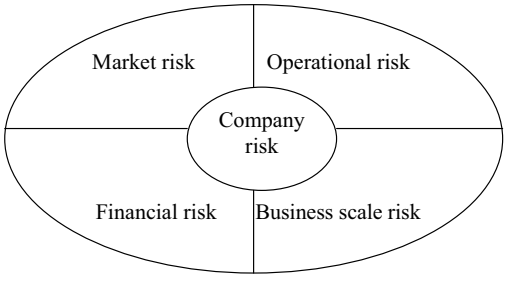

Fig. 1. Risks classification of a company – financial supermarket

The market risk appears after negative change of market prices for capital issues, exchange rate and interest rate shifts.

Operational risk is an event risk of inadequate internal processes and systems. It should be mentioned that in scientific literature there is no common approach to defining the notion "operational risk" because of different interpretations of this term. In our view, one of the most complete definitions was presented in the materials of the International Organization of Securities Commissions (IOSCO), operational risk is a risk of inconsistent operations of business dealing or functioning the system of management, which lead to material losses. Operational risk includes risk of loss because of mistakes while conducting internal operations, like: exceeding the fixed limits in the process of trading operations, unauthorized trade operations, fraud on behalf of company employees and errors of internal auditing, unskilled personnel, and computer networks errors. Recently the problem of forming operational risk has become topical especially in terms of financial supermarket with significant amount of operations difficult to control. This fact is also proved by initiations of operational risk investigations by Basel Committee in 1998 (The Main Principles of Effective Banking Control, 2006). It was defined that the problem of operational risk is of internal character depending on the level of corporate culture and relates to goals of the general company management. To estimate this kind of risk it is recommended to use calculations based on actual statistic materials. But the main problem is the diversity of operational risk. For example, Allfirst, subsidiary of Allied Irish Banks lost 691 million dollars as a result of trader's scheming over a period of 5 years that was disclosed only in 2002 (Bühler, Pritch, 2003).

The main type of risk for any financial institution is financial risk which is the additional risk of company owners in case of debt financing, without which financial conglomerates can't work effectively. Undoubtedly, in any case financial risk appears in financial institutions, first of all in banks. The size of risk within the structure of financial supermarket depends on the model it was built by. More essential level of financial risk that can be characterized as leverage is evidently seen in the British model. In 2002 Bank of New York increased its reserves to cover possible credit reserves in sum of 185 million dollars on the ground of lending a considerable amount of loans to telecommunication companies being in a difficult financial situation.

It should be mentioned that control authorities pay much attention to this type of risk and for the moment there have been worked out requirements concerning

surplus reserves formation for banking and non-banking financial institutions. Assessment of financial risk amount is the main problem nowadays because it is necessary to know the expected value of contract substitution, after which renunciation of fulfilment of obligations can take place. Renewal cost is defined as current market value of a contract, equivalent contract with possible following risk of non-fulfilment of obligations. Another approach being the basis of derivates appearance can be proposed, i.e. to define the risk level based on evaluation of potential contract value at the moment of its fulfilment. In order to define the level of risk in financial supermarket it is reasonable to use the systems of risk evaluation named J.P. Morgan's CreditMetrics and Credit Suisse Financial Products CreditRisk+. The goal of these systems is to assess distribution of portfolio losses due to possible risk. The CreditMetrics model analyzes behavior of separate mutually correlating assets and distributes losses for the whole portfolio. The Credit Suisse Financial Products CreditRisk+ model studies the relationship between average amount of problem contracts and the general number of company agreements with a certain credit rating as well as the volatility of this relationship. Preference of the second model in conditions of domestic financial market is accompanied by a number of problems because of the lack of transparent information from companies themselves.

A tendency towards powerful financial conglomerates occupying a key position in financial markets in Ukraine, and accordingly, the level of their riskiness, first of all the level of their financial risk can significantly influence the stability of financial system of the country in general.

Business scale risk is connected with change of demand and supply in market in general and in segments with structural units of financial supermarket in particular. Moreover, in terms of a supermarket itself risk of influence of separate structural units upon functioning the whole financial supermarket is defined on the basis of correlation of assets of every structural unit as well as model, by which a financial supermarket is built.

Examining risk built by the American model with legally independent structural units we can see that their risks don't directly influence each other but in any case owners of the said supermarkets are exposed to risk. Risk of financial supermarket by the British model appears in one structural unit and in any case it is transferred to other structural units; consequently not only owners can have significant losses but also counterparties cooperating with a given company.

2.3. Risk management of financial supermarket. Each type of risk can appear in activity of financial supermarket as a whole as well as its separate units. The more significant the share of unit in the general amount of all operations is, the more effective risk management in terms of defined segment will be. That's why there appears the necessity to manage not only the risk but also the whole conglomerate. Hence, risk-management of financial conglomerate is a process of investigation, estimation and control of the effect of internal and external factors with a negative influence upon a supermarket value. In this case the process of risk management of a conglomerate is based on the "upside down" principle because it has to embrace activities of the whole supermarket and to form a risk portfolio of such company. The management process itself must comprise the following stages (Fig. 2).

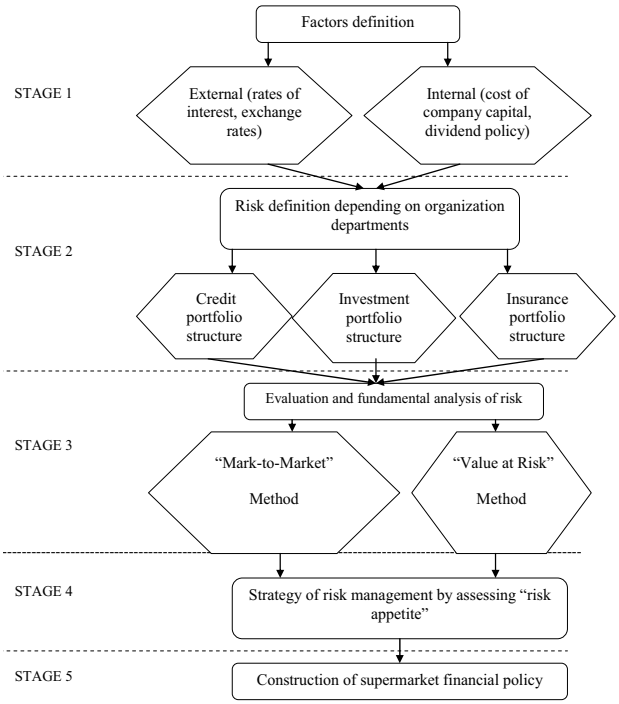

Fig. 2. Stages of financial supermarket risk management

Necessity of initiating the integrated system of risk management is conditioned by, first, increasing volatility of financial risks, second, recurrent crises in national and international financial markets, and a certain risk from the part of control authorities. Integrated system of risk management attracts clients, provides an opportunity to go into the international financial market to conduct operations and raise money for business expansion (Bautov A., 2007). Accordingly, such system must have clearly defined architecture, by which financial supermarkets will be able to control risks at every stage and organization department from one center – a specialized organization department responsible for risk management on a whole company level. Methods and strategy of risk management must be clearly defined and approved as well as informative-technological and organizational

infrastructure of risk management must be created within the limits of the given system.

It should be mentioned that the problem of risk management acquires a particular topicality because of adopting the standards of "International convergence of capital assessment and standards: new approaches" known as Basel II. It defines approaches of regulating requirements to financial companies with the following activities: financial leasing, credit cards issuing, investment portfolio management, investment consulting, credit and safe savings etc, i.e. auxiliary operations of the banking activity. Requirements to corporations and insurance agencies are separately defined (International convergence of capital assessment and standards: new approaches, 2006). Therefore the document at first sight dealing only with banking activity regulation significantly influences non-banking institutions. Adjusting to new conditions banks will have to open affiliated companies specializing in investment activities. Actually a tendency forms towards gradual reforming of classical banks into holding companies.

VAR (value at risk) method cannot save from financial losses. It enables to know whether the risk a company is running is expected. So this method should be used in addition to other methods of risk analyzing, not instead. Direct copying the foreign methods of risk assessing is problematic for the native practice and can be useful in case of certain corrections. The beginning stage of financial risks assessment as for their indicators is defining objects of risk in organization departments. Risk indicators are the signals of early detection of possibility of forming a crisis situation. Their terms of reference and spectrum may be rather broad (Khokhlov Y., 2006).

Quantitative evaluation of financial risks according to their indicators can be viewed with the help of Bayes Theorem. Let us assume that risk of any kind is evaluated. It means that probability of any negative event should be assessed. Let Q denote the probability of negative event. There exist n indicators for Q event that we set as H_i (i=1,...n). Risk level of each indicator is assessed as "very significant", "significant", "medium", "low", and "random". Passing to transitional probabilities and Bayes' notations the formula is as follows:

$P(H_i)$ – threat to i-indicator;

$P(Q/H_i)$ – probability of Q event providing the risk of i-indicator;

$P(H_i \& Q) = P(H_i) \times P(Q/H_i)$ – probability of crossing i-indicator and Q event;

$P(Q/H_i) = P(H_i \& Q)/ P(Q)$ – probability of i-indicator providing the realization of Q event;

$P(Q) = \sum_{i=1}^{n} P(H_i \& Q)$ – probability of Q event.

Therefore, there are given theoretic events for quantitative evaluation of probability of Q event as the event with negative character.

The most reliable estimate of expected financial risks can be received by combining historic mathematic assessments with current assessment indicators of financial risks.

The task of combining the evaluation of probability of Q event according to several assessments of probability of this event q_i $(i = 1, 2, ..., k)$ is to define the probability of Q event as a function from several preliminary estimates:

$Q = (q_1, q_2, \ldots, q_k)$.

Depending on the given information about dispersion of evaluations different methods of their combining are possible. Let us use the linear combining method in case when assessments q_i $(i = 1,2, ..., k)$ are not shifted to the known dispersions $D_1, D_2, ..., D_k$. As a valuation function the linear combination will be used:

$$Q = \sum_{i=1}^{k} a_i q_i .$$

If summarized coefficients a_i are equal to 1 then the complex valuation Q will be not-shifted. The meaning of coefficient a_i, which provides the dispersion minimum D for evaluating Q can be found:

$$a_i = \frac{1}{D_i \times \sum_{i=1}^{k} \frac{1}{D_i}} .$$

The resultant expression for assessments combination is as follows:

$$Q = \sum_{i=1}^{k} \frac{q_i}{D_i \times \sum_{i=1}^{k} \frac{1}{D_i}} .$$

Dispersion of complex assessment can be found:

$$D = \frac{1}{\sum_{i=1}^{k} \frac{1}{D_i}} .$$

The results of initiating the integrated system of risk management enable, first, to show risks greatly influencing financial results of supermarket activity; second, to work out the effective system of actions directed to the given risks management; third, to provide complex actions on the regular basis; fourth, to define

responsibility for risks management of different organization departments and levels of company management; fifth, to improve the overall efficiency of company functioning by cost saving and optimization; sixth, to increase the confidence level to company top management on the part of its owners, investors, creditors; seventh, to provide the growth of company capitalization, its credit and investment ratings.

Conclusions

Despite the risks in the system of financial conglomerate there exist a number of advantages for banks as well as investment companies, insurance agencies and private pension funds. First of all, diversification of services provides banks with additional competitive advantages for their own programs realization, which in its turn provides conditions for attracting more clients. Second, greater operational efficiency and swiftness of decision making as for investments and insurance products lead to creating more flexible programs of clients servicing, which also promotes competitive advantages of a financial conglomerate. Third, competitive advantages of a separate company as well as financial supermarket lead to general increase of company firmness against critical financial situations. Fourth, effectivization of retail chains and other banking resources leads to credit risk reduction. Fifth, classical banking operations provide the lower level of profitability comparing to operations in the capital market, i.e. it is an additional possibility for banks to increase the profitability level of their activities.

The main advantages for non-banking financial institutions are: the developed branch network of banks on the territory of a whole country enables going into regional markets with fewer costs and in shorter terms, hence, enhancing the volume of operations; rising the "trust effect" that can be explained with the following fact: banking system is better known for clients, especially for individual legal entities because this system had been functioning since the Soviet times with the centrally planned economy system when there were no financial companies in the capital market as well as the capital market itself. Therefore, individual legal persons have more trust towards banks; this fact can be used in terms of financial supermarket. One more important advantage can be found in the given context, using a popular trademark of a bank, as nowadays banks are more actively using the means of advertising in comparison with other financial institutions. As a rule, banks are oriented to cooperate with medium and large enterprises servicing their operations in the capital market. On the other hand, private pension funds and investment companies are primarily oriented to service individual legal entities' savings. Thus, integrating efforts in the given direction can substantially enhance the client base of banks and non-banking financial institutions. Besides, creating new financial products and financial programs can be a result of cooperation of investment companies with other non-banking financial institutions in terms of financial supermarket; that will promote profitability of companies within the alliance limits. Formation of the integrated information system, usage of common technologies enable financial institutions to access to clients base within a given conglomerate, which substantially reduces costs and activity risk of the whole financial supermarket.

In modern times of development the Ukrainian financial market financial intermediaries (banks) are gradually expand their activities. Lately non-banking financial institutions have been activating their work. Moreover, there is a tendency towards financial intermediaries' convergence and appearance of integrated financial intermediary – a financial supermarket, which is an additional stimulus for creating a new convergent model of the financial market.

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