Ratings as a measure of financial risk: evolution, tendencies and problems

This article deals with the history of the creation of the international rating agencies and their role in market economy. The authors have also presented their research on the methodological aspects of rating creation and factors affecting it as well as the possibilities of practical application of the acquired assessments in the risk management process.

Keywords: rating, international rating agency, rating process.

Introduction

The world financial crisis started in 2008 has again put on the agenda the question of rating assessment accuracy and the factors influencing the rating migration. Universal decreases in ratings of countries, emitters and banks which were revealed in the period of the crisis have become answers to unfair accusation of rating assessments of many companies’ financial tools.

The economic function of the international rating agencies consists of transferring the signals of various risk levels to market participants, thus providing investors with the possibility of correcting portfolios and finding the balance between the risk and profitability in the short term. The basic function of the international rating agencies consists of stabilisation of the markets, but not in their destabilisation. However the opposite takes place in practice, and there is an explanation to it:

- Dynamics of ratings have a clearly pro-cyclic character: ratings grow in a high conjuncture and fall during years of economic crises, strengthening pessimistic expectations of market participants;
- The ratings themselves can carry the function of self-fulfilling prophecies;
- Rating changes very frequently don’t occur ex ante, on the basis of the new
information, but appears ex post i. e. after there is a change in tendencies in the market. The international rating agencies reflect past events (Elkhoury, 2007; Raminsky and Sergio, 2002) instead of forecasting them. This is the tendency both of the financial crisis of 1997–1998, and the present financial crisis.

The above mentioned problems have essentially questioned trust in the activity of international rating agencies. The rating is a very influential instrument of assessment which has a very strong impact on the behaviour of the investor. Rating agencies don’t have moral responsibility for the owned and offered assessments as well as for the possible losses of the investor. Therefore there is an actual question of trust in a rating assessment and the necessity of introduction of elements of control. On the other hand, the introduction of mechanism of control questions the principle of “independence” of a rating assessment. According to the authors of the article the solution of this problem is connected with the questions of implementation of methodology used by a rating agency, as well as the question of how quickly a rating agency is capable of reacting to changes which have occurred in the object of research.

The object of research is the activity of international rating agencies and the ratings owned and offered by them.

The aim of the article is to analyse the evolution of ratings, their role in assessment of risks, the basic tendencies and problems in activities of international rating agencies at the present stage, and to suggest improvements of their activity and increase of trust in rating agencies.

Research tasks:
1. To analyse the evolution process of ratings and other rating processes;
2. To analyse the drawbacks in the activity of the international rating agencies at the present stage;
3. On the basis of the given analysis, to make conclusions and work out suggestions for the improvement of the international rating agencies activity and increase public trust in rating agencies.

While working on the article the authors used the following research methods: generally accepted quantitative and qualitative methods of research in economic science, including comparative analysis and synthesis and graphical methods.

Evaluation of ratings and rating processes

A rating is a complex risk assessment of a firm, bank, insurance company, share fund, state, region, issue of bonds and other financial tools on the discrete ordered scale which is called a rating scale.

The Latvian word ‘ratings’ is derived from the English word rating which means assessment or defining the value and belonging to a certain rank or category. Ratings of a state, region, enterprise or commercial bank show the subject’s security, stability and solvency. The directions of formation and development of rating systems involve the following economic components:

- Production field (acquisition, transport, communication services enterprises and others);
- Financial field (commercial banks, insurance companies, investment funds etc.);
- Market of goods.

The authors of the article have the opinion that ratings have an informative function and assist to work out a long-term strategy of activity. Ratings are part and parcel of business information; can insure
信任在业务中，并且是投资者和其他感兴趣人员的良好指标。

评级系统形成（图1）预测了评级方法确定和公布的方法论和技术特性。首先，必须定义评级的某些目的和方向，被评级的主体，以及方法论特性，研究过程及其指标，区域和领域特征结构，假设和限制，表现形式和分布时间，商业基础。

形成评级是一项特殊的活动，具有市场 Economy 的基本需求。专门的评级机构从事于创建评级，其主要任务是提供信息中介，支持评级系统。著名的评级机构，如 Standard & Poor’s，成立于1860年，Moody’s Investor Service，成立于1914年，Fitch IBCA，于2000年在 Thomson Financial 集团收购后重组。

图1. 评级形成方法和评级对象分类

来源：Карминский，2005。

图2. 全球评级服务市场的分配

来源：Standard & Poor’s, 2011; Moody’s Investor Service, 2011; Fitch IBCA, 2011。

图2. 全球评级服务市场的分配

来源：Standard & Poor’s, 2011; Moody’s Investor Service, 2011; Fitch IBCA, 2011。

Formation of ratings is a special kind of activity which has essential demand in the market economy. The specialised rating agencies deal with formation of ratings, their main task is information intermediary by supporting the systems of ratings. The famous rating agencies, which make assessment of commercial banks are Standard & Poor’s, founded in 1860, Moody’s Investor Service, founded in 1914 and Fitch IBCA reorganized in 2000 after take over by Thomson Financial BankWatch.

图1. Methods of rating formation and classification of ratings subjects

Source: Карминский, 2005.

图2. Devison of the global market of rating services

Source: Standard & Poor’s, 2011; Moody’s Investor Service, 2011; Fitch IBCA, 2011.
In the course of evolution of ratings and rating agencies it is necessary to specify the decision of the United States Securities and Exchange Commission in 1975, according to which some rating agencies became *nationally recognized statistical rating organizations* (NRSRO). The existence of this list is one of the reasons that a number of rating agencies isn’t big, despite of high profitability of this business.

Prior to the beginning of seventies of the 20th century the majority of rating agencies received income by selling the ratings to bond holders. Since 1970 Moody’s Investor Service and Fitch IBCA have started taking payments from emitters for exhibiting of a rating to issue bonds. Some years later their example was followed by Standard&Poor’s (White, 2002). Now Moody’s and Standard&Poor’s own and publish ratings to all releases of the corporate bonds registered by SEC, using only the public information. Such ratings are called *ratings without a demand* (unsolicited ratings). On demand of the emitter and under condition of payment rating agencies carry out more detailed analysis of a condition of the emitter and offer *a rating on demand* (solicited rating). The fee for the services of rating agencies is from 25 thousand to 130 thousand US dollars (White, 2002). Their fee also depends on the chart of payment and type of a rating.

The main service principles of international rating agencies are independent assessments, publicity and availability, collective nature, interactivity, confidentiality of the information, use of rating scales which allow comparing the subjects of ratings. It is necessary to point out that the rating carries out the function of *transformation* (Солодков, 2010) of great amount of information into public opinion referring to the classification group of the subject. Actually the main activity of a rating agency is to perform the role of an information intermediary. Based on the analysis of techniques of rating agencies, the process of assignment of a rating consists of the following steps:

• Classification of subjects of ratings;
• Working out a technique of forming the ratings;
• Shaping the models of assessment of each factor at the basis of the objective data (audited financial reports) and the subjective (expert) data;
• Receiving the integrated assessment;
• Consideration of results by a rating committee and taking a decision on referring the subject to a certain rating category;
• Agreeing to the decision taken with the rating subject (the appropriated rating can remain confidential);
• Release of a rating report.

The international rating agencies offer various rating products (Table 1). The leading role is played by the credit ratings based on the opinion of a credit agency about the general credit status of the borrower. Credit ratings are used both by investors and borrowers as well as financial intermediaries. Rating agencies also publish ratings on national scales. The basic difference consists in recording of sovereign risks for the international ratings which are connected with the insolvency of the state, i.e. recording of direct or indirect impact of this factor on the level of solvency of the company. It is necessary to specify that the sovereign rating of the state is the so called "ceiling" for a rating of companies in the given country.

Granting of a wide range of services by rating agencies is connected with the influence of the following factors (Langohr, 2008):

• Development of financial intermediary which stimulated development of credit ratings;
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• Investing resources in various financial instruments and using rating products for decrease of a risk level;
• Globalisation of the financial markets stimulated the necessity of assessment of counterparts with the aim of simplifying the process of decision-taking;
• Introducing of new structured products (financial innovations).

Regulation is the answer to the activity drawbacks of rating agencies

The global financial crisis has revealed a number of problems in management of a considerably extended financial system. In the first decade of this century, new instruments have been created. On the one hand they provided a higher profit but on the other hand – raised the level of risk at the expense of the threat of growing “bubbles” of the prices for the actives that couldn’t estimate adequately both regulating instruments and rating agencies.

Representatives of rating agencies very often declare that they have a deep analytical knowledge and a critical amount of the experience, necessary for an adequate assessment. Practice shows that agencies regularly make the errors leading to financial losses of investors. It is enough to mention loud corporate scandals of 2000 when apart from agencies the auditors got mixed up too, such as Enron, WorldCom and Parmalat. The irresponsible and ambiguous attitude of rating agencies to the provided bonds became one of the main reasons of the American mortgage crisis. Failures in assessments, failures in statistics of rating agencies of developing countries, failures in statistics of the Conference of the United Nations on trade and development, were even greater (Table 2).

The international rating agencies are accused of non objectiveness of the appropriated ratings. It would be desirable to cite several examples.

In the USA there is a double deficiency (both the balance of payments of current operations, and the federal budget) which is financed at the expense of capital inflow from abroad. Thus if the size of deficiency of the balance of payments of current operations in crisis tends to reduce (throughout 2006–2008 it decreased from 788,1 billion dollars to 568,8 billion dollars) (CIA, 2010), on the contrary deficiency of the federal budget of the USA promptly increases. If in 2004–2007 it fell from 412,7 billion dollars to 162,0 billion dollars, in 2008 it reached

<table>
<thead>
<tr>
<th>Name of a product</th>
<th>Moody’s</th>
<th>Standard&amp;Poor’s</th>
<th>Fitch IBCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term credit (deposits)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Short-term credit</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Financial stability</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonded loan obligations</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Corporate governance</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Supports</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On national scales</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Source: Standard & Poor’s, 2011; Moody’s Investor Service, 2011; Fitch IBCA, 2011.
454.8 billion dollars (FMS, 2008) and only in the first quarter of a new fiscal year it reached a record amount of 485.2 billion dollars and following the results of 2009 it can approach 1.2 billion dollars (CNNMoney, 2009). The events of September-October in 2008 became the turning point when the two backbone investment banks of the USA left the market (absorption of Merrill Lynch, bankruptcy of Lehman Brothers). It has been the largest failure of the American financial regulation since the Great Depression. Though more than 40 banks went bankrupt in the American market in 2008, deficiency of the state budget of the USA grew considerably, and investors suffered losses, estimated in trillions of dollars, but none of the agencies declared the revision of a rating of the United States! Only in April, 2011 the international rating agency Standard-Poor’s declared the decrease in the forecast of sovereign credit rating AAA from „stable“ to „negative“, having caused a real shock and panic in the world of finance. The agency has declared that there is 33 % probability of the fact that in the nearest couple of years the credit rating of the USA will be reduced.

Speaking about Japan, whose external debt makes 204 % of the Gross National Product, the international rating agency Standard-Poor’s only in January, 2011 (for the first time in 9 years) declared rating decrease on one rating category – to level AA-.

The international rating agencies started to reduce a sovereign rating of Latvia in 2008 (Fig. 3) as soon as there were the first signs of imbalance of a macroeconomic situation.

“At the right moment” the international rating agencies have lowered a rating of Greece to the level of “junk bonds” and by that have put into action the new crisis of euro. Simultaneously “at the right moment” promissory notes of such countries as Portugal and Spain have been lowered. Agencies are regularly late with the assessments when there are normal market conditions and, on the contrary, show instant reaction in the period of crisis only strengthening financial instability by that.

In the economic science the activity of rating agencies are connected with a moral hazard, risk of adverse selection because of the asymmetry of the information and the

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**Statistics of failures of rating agencies**

(Number of steps of a rating on which one-time revaluation of a sovereign rating has been made)

<table>
<thead>
<tr>
<th>States</th>
<th>Year of crises</th>
<th>Standard-Poor’s</th>
<th>Moody’s Investor Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>1997</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1997</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>The South Korea</td>
<td>1997</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1997</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>The South Korea</td>
<td>1998</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Rumania</td>
<td>1998</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Russia</td>
<td>1998</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Moldova</td>
<td>1998</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>Argentina</td>
<td>2000</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2002</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

*Source: Elkhoury, 2008.*
principal-agent problem (Моисеев, 2009). In practice the claims to the agencies are the following:

- Dependence on fee amount on the level of an appropriated rating;
- Dependence on the information of the emitter;
- Voluntarism in the information analysis;
- Offering consulting services simultaneously.

The chronic problem of rating agencies is that they are constantly criticised for their charged payment for the rendered services. Many authors (Partnoy, 1999) specify the possible clash of interests: the rating agency can underestimate a rating without demand for the purpose of constraint to receive fee for a rating on demand. However it is necessary to point out that in research papers investigating distinction in ratings on demand and without demand, there is no acknowledgement of the above mentioned criticism. In research paper of W. P. H. Poon (2003) we deal with the analysis of Standard & Poor’s ratings of 265 companies from 15 countries in the period of 1998-2000. The author concludes that alongside with other equal conditions ratings without demand are lower than ratings on demand. This fact can be explained by the effect of self-selection: only the companies which are confident of their financial position order a rating. In its turn, rating agencies explain this effect by the conservative approach to exhibiting a rating without demand, based on the incomplete information on the rating subject.

Because of the interests clash users of ratings lose: they are banks, investors and regulators, but not the participants of the process of rating themselves. According to the authors of the article, the best solution of this problem which will lower the stream of criticism and will eliminate the clash of interests is that the assignment of ratings should be carried out free of charge. The
international organisation of commissions on securities calls these ratings *unsolicited ratings*; these are the ratings, which agencies appropriate without a formal order from the emitter or the borrower. In these cases the payment for assignment of a rating isn’t planned and meetings or information exchange between agency and the client aren’t foreseen (IOSC, 2003). Suggesting the above mentioned solution to a problem, the authors realise that:

- Decrease in income of rating agencies is possible. However, agencies can earn on credit analytics and on granting the consulting services;
- Refusal in granting of the documentation of internal character is possible. In this case there is a question of objectivity and quality of the appropriated rating. The international agencies insist on the access to the internal information which provides a higher quality of the analysis. However the research of some central banks proves the opposite. In October, 2008 the Research Institute of the Central Bank of Finland (Peresetsky, Karminsky, 2008) published the results of the analysis according to which the models of ratings based only on the generally accessible information, have as good forecasting ability, as the models which rely on the internal information. In the National Bank of Belgium (Roy, 2006) they have come to a conclusion that gratuitous ratings at the basis of public information don’t compete with the official ratings and are even more careful. Granting the ratings without the order will allow to expand a number of subjects having a rating, to avoid rating “purchase”, as well as to encourage the flow of new participants of the rating market, thus to improve the quality of the offered services.

It is necessary to point out that the suggested solution of a problem is very radical and its introduction is connected with various difficulties. The first step to the introduction of the above mentioned suggestion can be introducing of *adjustable pricing* on services of ratings. The state can establish the fixed tariffs for ratings, disregarding the size of the business of the client and importance of a rating. It will allow to minimise stimulus for agencies, and customers to falsify ratings deliberately or influence the process of their assignment.

There are well-known examples when rating agencies couldn’t foresee the events in due time (a problem of used *methodology*), which had serious economic consequences: the largest financial crisis in Asia, Russia and in a number of other developing countries (1997–1998), bankruptcies of companies *Enron*, World-Com, defaults of bad quality mortgage securities (2007–2008). The explanation of the above mentioned failures is in the use of so called *through-the-cycle* methodology, according to it the assigned ratings should take into account and react to the data of creditability changes, permanent only for the time being, which may occur in connection with outside interference and don’t change for a short period of time due to creditability fluctuations. This kind of approach is an attempt to trade off between the rating security and timeliness. Timeliness is a must for the rating as an analytical and informative product. The authors of the article take an opinion that security means that there are no fluctuations in the assessments of ratings in a short period of time. Thus the methodology, *through-the-cycle* means certain inertia of ratings towards new information. On the other hand, it also meets the demands of investors. Too frequent changes of a rating would make investors to reconsider investment portfolios, thus increasing the costs
as well as creating a feeling of uncertainty of participants of the market. Rating agencies want their clients to trust in them, they want to have a good reputation; therefore they try to present their rating process in details. They publish and describe their methods of working out and organising ratings where they specify the factors and the scales the agency takes in consideration in exhibiting the rating, as well as the experts of an agency make an assessment of every factor. However, in spite of the technique of openness, you can't repeat the methods, what is clear enough: if it were possible to reproduce them, the competitors could easily do it. Taking into account the above mentioned as well as the influence of ratings on behaviour of investors, the international rating agencies must take responsibility for the accuracy and efficiency of ratings.

The activity of rating agencies demands adequate, reasonable management. The Chief Economist of IMF O. Blanchard (2008) also mentioned the problems of ratings in his report Forthcoming problems to the states and the governments of the summit G20 which took place in Washington on November, 15th, 2008. In his opinion, “the structures of supervision of rating agencies and risk management should be reconsidered for strengthening of market discipline”. Following the results of the summit of The Group of Twenty on the financial markets and the world economy the declaration was adopted. One of the regulations of the declaration dealt with taking more strict control of rating agencies. The following can be referred to the minimal standards:

- Requirements to the quality and sustainability of ratings (i.e. rating assessments should be objective and fair, and process of rating clear, transparent);
- Independence and exclusiveness of rating assessments (prohibition of combination of different kinds of activity);
- Responsibility of agencies for the exposed ratings (it is necessary to subject agencies to official sanctions in case of detection obvious errors in assignment of ratings).

Modern requirements to rating agencies are presented in several documents:

- Materials of Basel Committee (The International convergence of measurement of the capital and the capital standards BIS, June 2004);
- IOSCO Code — Fundamental regulations for credit rating agencies (Code of Conduct Fundamentals for Credit Rating Agencies, 2008). The Chairman of the Technical Commission IOSCO Michel Prada said: "Our Code of professional activity for rating agencies serves to protect the interests of investors, maintain transparency of securities market and decrease the risk. We have mentioned the most significant problems caused by the world crisis to the market of crediting – at least, those of them which have a direct relation to the trust of investors in the ratings of financial tools exposed to professional organizations".

Introduction of responsibility for exposed ratings encourages strengthening financial position of rating agencies. According to the authors, it is necessary to establish standard requirements to the size of their own capital. On the one hand, it will allow to lower sensitivity of agencies to risks, and on the other hand – will make their proprietors and managers have a more serious attitude to ratings. The minimum capital owned by agencies represents the analog of requirements to owned capital of auditor firms which exist in many countries.
Conclusions and suggestions

Formation of ratings is a special kind of activity which has a demand in the market economy. Positions of Basel II have strengthened the interest to ratings, their models, and internal systems of ratings, connecting norms of reservation with ratings of the borrower or the tool.

At the same time there is a number of restrictions on activity of rating agencies. They don't have legal responsibility for their conclusions, and a regulating element of their activity is the reputational capital. Various structures of supervision use ratings for regulation of financial activity in these connection ratings have a licensing function that predetermines a particular interest to them both from the side of investors, and the state structures.

The crisis of 2008-2009 has its impact on the market of rating services; it revealed a number of drawbacks and discrepancies in activity of rating agencies. For improvement of the activity of rating agencies and increase of trust in them, the authors of the article have made the following suggestions:

- Assignment of ratings should be carried out free of charge, which will lower a stream of criticism and will eliminate the clash of interests. The first step of implementation of this suggestion could be the introduction of adjustable fees on services of rating agencies;
- The international rating agencies should take responsibility for accuracy and efficiency of the appropriated rating, continuously improving their methodology;
- Introduction of adequate, reasonable regulation to activity of rating agencies;
- It is also essential to establish standard requirements to the size of their own capital.

Notes

1 According to the official reports the income of agencies in 2008 are estimated: Standard & Poor’s – 2,0 billion dollars, Moody’s Investor Service – 1,4 billion dollars, Fitch Ratings – 630 million euro.

2 The USA rating AAA was appropriated on January 1, 1941 and has never been changed.

References

RATINGS AS A MEASURE OF FINANCIAL RISK: EVOLUTION, TENDENCIES AND PROBLEMS


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REITINGAI KAIP FINANSINiS RIZIKOS MATAS: RAIDAI, TENDENCIJOS IR PROBLEMAS

Šiolaikinèje rinkos ekonomikose pateikiamas informacijos kiekis yra nepaprastai didelis, plačiai svyruojantis ir net didèles kompansijos stokoja ištakliai, skirtų informacijos apdorojimui bei atsirinkimui. Sioje situacijoje ypatingai svarbu tapti plètojimu, kuris yra galiuotis pagal gamybą (kompanijos atstovaujanèios kasybos, transporto, komunikacijos ir kitas pramonèes šakas), finansai (komerciniøj bankøj, draudimo bendrovës, investicinij fondai ir t.t.) ir laikų rinkos. Žinomiausios reitingøj agentøjus yra Standard & Poor’s, kuri buvo įkurta 1860 m., Moody’s - įkurta 1914 m. bei Fitch IBCA, kuri 2000 m. po Thomson Financial Bank-Watch perémino buvo reorganizuota. Pastaruoj metu tarptautiniøj reitingøj agentøjų veikla tapo daèniai kritikuojama, nurodant nesugebëjimà laiku sureaguoti ià ekonomikos ir pasaulio pokyèius. Ypaè plaèiai aptariama trijøj Amerikos reitingøj agentøjų dominavimo problema, nes tokioj bûdu pasikeliamas viso pasaulio objekto finansines rizikos vertinimas savose rankose. Nei viena Europos ar Aziøj reitingøj agentøjà netiekia paslaugøj tarptautinëje reitingøj rinkoje, o tai kelia abejonën dël reitingøj neðaliøo vertinimo ir poreikij jvestì grieètà tarptautiniøj reitingøj agentøjų veiklos priežiûrà.

Straipsnyje apzvelgiami tarptautiniøj reitingøj agentøjų susikurimo istorija bei jà vaidmuo rinkos ekonomikoje. Pateikiamai reitingo nustatyto metodo dologiniøj aspektai ir visa tai ëjantyjantys veiksniøj bei ëjytyj vertinimøj praktinës taikymo galimybiø rizikos valdymo procese.