

Ratings as Measure of Financial Risk: Evolution, Function and Usage

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The rating agencies were emerged by the demand from market economy. Such agencies take the job of independent evaluation of the firms' financial strength, which allow firms decrease their expenses on their own market monitoring. It is extremely important with increasing number of potential business partners.

The paper discusses history of rating business, methods of assigning ratings, rating classification, function and the directions of use.

Key words: ratings, rating agencies, risk evaluation

JEL classification: G21, G32, G24

1. Introduction

Amount of information is so great in the modern market economy that even big firms lack sufficient resources for processing it. Independent valuations of companies' and securities' risk play a special role in this situation. The main instrument of regular expertise is ratings provided by the rating agencies (Karminsky et al. 2005). Ratings are important as an available independent complex valuation of risk in the process of business decision-making.

The paper considers history of ratings' and rating agencies' evolution, their role in the market economy, and also possibility of practical ratings' usage in the system of risk management. Evolution and role of ratings in the Russian practice are analyzed separately.

2. Evolution of ratings and rating processes

According to the modern treatment, *rating* is a complex valuation of risks of a firm, a bank, an insurance company, a mutual fund, a country, a region, bond issues and other financial instruments by the discrete ordered scale called rating scale.

Forming of ratings is a special activity strongly demanded in the market economy. Such activity is implemented by specializing *rating agencies* (RA). Their task is information mediation by means of maintaining rating systems.

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The first credit ratings were published by Moody's agency (which was founded by John Moody, 1868 – 1958) in 1909 concerning bonds of the US railways³. These ratings were intended as an independent valuation helping investors to make decisions with an allowance for risk. This agency started its activity in 1900 with publication of Moody's Manual of Industrial and Miscellaneous Securities. The manual provided information and statistics on stocks and bonds of financial institutions, government agencies, manufacturing, mining, utilities, and food companies. The agency applied ordered symbolic scale (from Aaa to C). This scale was used by some firms in order to evaluate credits as early as the end of the 1800's. Now it is a standard for rating marking.

The rating agency called Standard & Poor's (S&P) was founded in 1941 as a result of merger of two companies: Standard Statistics and Poor's Publishing Company⁴ (in 1966 Standard & Poor's was acquired by McGraw-Hill, Inc.). In 1916 Standard Statistics started to assign credit ratings for corporate bonds and – soon after - ratings of sovereign debt instruments. However, it is considered that the business of Standard & Poor's began to function in 1860 when Henry Varnum Poor started to publish a collection of financial information strongly demanded by the European investors worried about their investments in the projects of infrastructure creation in the USA.

The rating agency called Fitch Ratings⁵ (Fitch) was originated from Fitch Publishing Company founded in 1913 by John Knowles Fitch who started to publish ratings by the discrete scale (from AAA to D) in 1924. After a number of mergers (IBCA Limited, 1997; Duff & Phelps, 2000; rating business of Thomson BankWatch, 2000) Fitch has become one of the three internationally recognized rating agencies.

The scales used by agencies practically coincide. Their conformity is described in the Table 1 (Cantor, Packer, 1995).

³ www.moody.com/moodys/cust/AboutMoody/AboutMoody.aspx?topic=history

⁴ www.standardandpoors.ru/page.php?path=history

⁵ www.fitchratings.ru/about/history/index.wbp

Table 1**The Long-Term Debt Rating Scale**

S&P, Fitch	Moody's	Interpretation
Investment ratings		
AAA	Aaa	An obligor has extremely strong capacity to meet its financial commitments.
AA+	Aa1	An obligor has very strong capacity to meet its financial commitments.
AA	Aa2	
AA-	Aa3	
A+	A1	An obligor has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories.
A	A2	
A-	A3	
BBB+	Baa1	An obligor has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.
BBB	Baa2	
BBB-	Baa3	
Speculative ratings		
BB+	Ba1	An obligor is less vulnerable in the near term than other lower-rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitments.
BB	Ba2	
BB-	Ba3	
B+	B1	An obligor is more vulnerable than the obligors rated 'BB', but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments.
B	B2	
B-	B3	
CCC+	Caa1	An obligor is currently vulnerable, and is dependent upon favorable business, financial, and economic conditions to meet its financial commitments.
CCC	Caa2	
CCC-	Caa3	
C	Ca	An obligor is currently highly vulnerable to nonpayment; bankruptcy process (or analogous action) against the obligor was initiated.
D	D	Default on debt obligations.

In 1975 the Security and Exchange Commission (SEC) started to treat some rating agencies as the "Nationally Recognized Statistical Rating Organizations" (NRSRO). The three biggest agencies had become the first members of this list.

An existence of this list is one of the explanations of small quantity of rating agencies in spite of high profitability of this business. For example, during 1995 – 2001 the average Moody's Return On Assets ratio was equal to 42%. Another important explanation is the fact that the market prefers standardized ratings and agencies with established reputation (White, 2002).

Various supervisory bodies set rules regulating financial activity depending on ratings. For example, in 1931 the US Federal Reserve has prohibited bank purchases of bonds with rating below investment level. Investment companies and funds have right to use financial instruments with minimal rating specified in the investment declaration. For many of them this rating is consistent with level BBB by the S&P scale. The Basel Committee offers banks to set reserve ratios depending on the ratings of the borrowers.

Ratings AA and A are also used as the cutoff level. For example, US Department of Labor permitted for the US pension funds to purchase securities with rating A or more high level (Cantor, Packer, 1995). The rules of agents' cutoff depending on their rating are included in the regulations of many tenders and auctions for distribution of private and public funds, and also consulting.

At the present time the most popular instruments of internally borrowed instruments for the Russian banks are syndicated credits and Eurobond issues. Funding is also possible by means of initial public offering (IPO). A bank has no right to use these instruments if it is not rated by at least one of the three leading international rating agencies (Moody's, Fitch, or S&P). Usually international investors suppose that a receipt of ratings of two rating agencies is desirable.

The rating activity can relate to the companies, banks, regions, financial instruments of both stock market and capital market (from bonds to complexly structured securities). The rating determines an agent positioning in the rating scale in relation to "ideal" agent; that is, a process of rating activity is similar to benchmarking (comparative analysis of competitors) but supposes significant expert component (Karminsky et al., 2006).

The most popular kind of ratings is ratings of debt obligations, mainly, bonds whose quantity numbers ten thousands. In the US S&P and Moody's assign ratings to all bond issues.

What is essence and *function of ratings*? They determine possible principles of classification (grouping) of some economic agents or financial instruments. In addition, indirectly they help to estimate probability of such agent's default on obligations (Hamilton, 2002; Karminsky et al., 2005). Figure 1 depicts default statistics for 1983 – 2002 concerned with five-year bonds for different Moody's rating classes. So, according to the statistical data, it is possible to estimate corresponding default probability for each class of ratings.

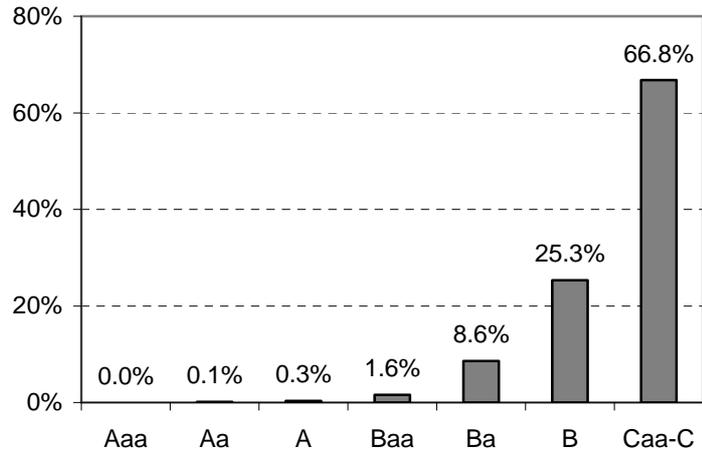


Fig. 1. Default statistics for five-year securities depending on the ratings' class, according to Moody's agency data (1983-2002)

A market estimated probability of default on obligations is reflected in their price or spread in relation to risk-free asset (which is usually the US Treasury securities). The Table 2 (Altman, 1989) shows correspondence between spreads and ratings. Higher spread and higher default probability correspond to lower ratings.

Table 2

**Spread between corporate bonds and the US Treasury securities
(averages for 1973-1987)**

Rating	Spread, in basic points
AAA	43
AA	73
A	99
BBB	166
BB	299
B	404
CCC	724

Does bond rating provide additional information about default probability for the market? Some works show that changes of rating give new information to the market (see Jewell, Livingston, 1999). Kish et al. (1999) showed that bond spread depends upon discrepancy between S&P ratings and Moody's ones assigned to this issue. The great difference between ratings corresponds to uncertainty treated by the market as an additional risk.

We can note that a rating agency is *not legally responsible* for its rates. And there is the emphasis on the fact that ratings are agency' opinion and not a recommendation to buy or to sell some instruments/obligations of an issuer.

Up to the beginning of the 1970's the most rating agencies earned money via selling of its ratings to potential bondholders (investors). However, since 1970 Moody's and Fitch started to take from issuers pay for bond issue rating assigning. Over the years their example had been followed by S&P (White, 2002). These decisions have coincided (in time) with dissemination of cheap copy-making machines. It probably decreased agencies' earnings from ratings' publication.

At the present time Moody's and S&P assign and publish ratings to all corporate bond issues registered by the SEC. They use only publicly available information at that. Such ratings are called "unsolicited". Agencies make also more detailed analysis, with use of provided confidential information, if the issuer demands it and is obliged to pay. The rating assigned on the base of such detailed analysis, is called "solicited". The level of pay fluctuates from \$25, 000 to \$130, 000, depending on schedule of pay and issue size (White, 2002).

Up to 2000 Fitch assigned only "solicited ratings". In practice ratings of this agency are often demanded by the issuers whose ratings assigned by two "main" agencies differ. In these cases such issuers hope to get more favorable rating (White, 2002). However, the work (Cantor, Packer, 1997) showed that this consideration is not critical when the issuer decided to demand third rating, Rather it is a decision by the big issuers having large experience of functioning on the stock markets.

Discrepancies between Moody's ratings and S&P ones attract many authors. There are two considerations which can influence on the difference between ratings. Firstly, if discrepancies are often too significant, it will undermine reputation of rating agencies and decrease their profits. Secondly, if discrepancies are negligible, issuers will have no incentives to order two ratings, and profits of rating agencies will also decrease.

Ederington (1986) concluded that there is no systematic difference between ratings; i. e. it is determined by random errors. However, Morgan (2002) shows that the less issuer' transparency is the more ratings' discrepancy is, and it is greatest for banks and financial companies. The analogous conclusion is in Livingstone et al. (2007).

Moon, Stotsky (1993) considered assigned by Moody's and S&P ratings of municipal bonds in the US in 1981. They founded statistically reliable difference in choice of the factors determining ratings of two agencies.

Livingston et al. (2008) conclude that if ratings differ there will be increase of probability of ratings' change during the following 4 years, and it is most likely that rating will be raised (reduced) by the agency which has primarily given more low (high) rating. Under the presence of original discrepancy between ratings such difference will remain in the future approximately with probability equal to 70%; and under the coincidence of ratings such situation will remain during the following 4 years approximately with probability equal to 60%. Such conclusions contrast with hypothesis (see Morgan (2002)) about random character of discrepancies.

The chronic problem of the rating agencies is the fact that they receive pay for rating assigned from those companies which demand this rating. The agencies have been criticized for it. Many authors point possible conflict of interests out. A rating agency can underestimate "unsolicited rating" in order to compel issuing company to pay for "solicited rating" (Partnoy, 1999). This concern is reinforced by the fact that rating agencies have failed to predict bankruptcies of Enron, WorldCom, Parmalat etc.

However, many works studying differences between solicited ratings and unsolicited ones do not support this critique. Poon (2003) considers S&P ratings of 265 companies from 15 countries for 1998 – 2000. The author concludes that, other things being equal, unsolicited ratings are lower than solicited ones. But this phenomenon can be partly explained by the self-selection effect: only companies which are sure of their financial health order rating. The rating agencies explain this effect by making reference to conservative approach to unsolicited rating assigning based on incomplete information about a company.

Roy (2006) studied Fitch ratings of Asian banks in 2004 (since 2000 Fitch assigns unsolicited ratings to banks in this region). On the one hand, the author concludes that Fitch argument about approximately identical approach to ratings' assigning is correct. The point is that banks' financial indicators enter into the models of both types of ratings with identical weights. On the other hand, other things being equal, unsolicited rating is turned to be economically less significant (by 0.9 points) than solicited one.

In June 2008 the three leading world agencies assigning ratings to the bonds - Moody's, Fitch and S&P – have taken a first step to the fundamental change of the business concerning rating activity. Now, according to the agreement with Andrew Cuomo, who is the New York State Attorney General, the three leaders of this business will mutually verify methods of commission-charging for bond rating⁶. Presumably, agencies will quarterly disclose information about fees received for rating assigning to the Alt-A and subprime mortgage bonds. Such infor-

⁶ The Wall Street Journal, 4th June 2008

mation disclosure should help investors to find cases in which, possibly, bond issuer contrasted some agency with other one in order to get more high rating.

There are very famous cases when the rating agencies have not forecasted in proper time events generating serious economic consequences: the greatest financial crisis in the Asian region, Russia and other developing countries (1997 – 1998), bankruptcies of Enron, WorldCom, Parmalat, Arthur Andersen, default on low-grade mortgage bonds' repayments (2007 – 2008).

There is an important factor partly explaining the rating agencies' "inability" to predict in proper time above-mentioned events. These agencies declare that they use "through-the-cycle" methodology of a rating activity when rating reflects a company's medium-term perspective rather than its momentary state. It is consistent also with investors' needs: too frequent changes of ratings would force them to reconsider often investment portfolio. It, in turn, could generate additional costs and increase market uncertainty.

Conclusions of the empirical work (Altman, Rijken, 2004) support this proposition. This work shows that S&P ratings correspond to horizon which is equal approximately to 5 years. In addition, the work reveals mechanism of the observed ratings' stability. The point is that a rating agency changes value of rating when a difference between calculated and current values of rating is equal to 1.5 points.

It is necessary to emphasize the fact that the main factor which guarantees impartiality of rating is a market reputation of an agency itself and level of trust in it. It potentially gives incentives for agency to be impartial.

In the developing markets the very fact of an order of rating assigning by a company gives indirectly evidence of transparency of it. The rating agencies take measures in order to increase level of trust in them. The juridical relations between a customer and a rating agency - and also its interactions with analysts from an agency - are organizationally separated. An addition, financial relations are unified and do not depend upon results of rating activity. The specific character of the developing markets is the following one: according to the market treatment, a presence of even not very good rating is better than its absence, because uncertainty is a negative factor.

The rating agencies aspire to give rise to the customers' trust and to support their own reputation. Therefore they seek to present own process of rating activity at great length. They publish detailed procedures of ratings' compilation. These publications describe what factors and with what weights are taken by an agency in a process of rating activity into account. However, an evaluation with an account of each factor is compiled by the experts of an agency. Therefore,

in spite of “openness” of a procedure, it cannot be reproduced. This fact has been understood: competitors would easily imitate such procedure if it had been possible.

However, we note that since the experts of the agency are distributed among regional offices, so an interpretation of a method, like any peer review, can be characterized by an element of subjectivity. It increases uncertainty of an estimate.

According to the international rating agencies, the *basic principles* of rating services’ provision are an independence of evaluations, publicity and availability, collective nature, interactive character, confidentiality of information, usage of rating scales enabling to compare issuers. The rating approach applied consistently by the international rating agencies requires an account and an analysis of intrinsic information about a rated organization. A methodology of a rating study making is based on the classification of the essential factors and determination of quantitative assessment of risk factors which are inherent to rated issuer or bond issue.

A rating performs the *function of transformation* of large amounts of information into public opinion about classified group which an agent belongs to. It is the essential function of a rating agency as an information mediator. According to the agencies’ procedures, a process of ratings’ making consists of the following steps:

- classification of agents which can be rated;
- elaboration of a procedure of rating’ forming which takes the main factors of agents’ evaluation into account;
- creation of models enabling to estimate each factor on the base of objective (auditor reporting) and subjective (expert opinions) judgments concerning them;
- derivation of an integral estimate and formation of opinion of analysts which are responsible for a rating activity concerning some or other agent;
- consideration of results by a rating committee and collective decision-making which determines agent’ labeling as an element of a concrete rating group;
- reconciliation of results with rated agent (there is a possibility of confidential rating assigning);
- publication of a rating report containing an essential information about a rated agent with an account of the most important factors.

The most important kind of economic agents’ ratings is *credit ratings*. Credit rating is – based on an estimation of risk factors – a rating agency’ opinion regarding general borrower’ creditworthiness or her creditworthiness in relation to concrete debt obligations.

Credit rating is used by investors, borrowers and financial intermediaries. Investors demand ratings in order to simplify and cheapen a procedure of analysis of debt obligations be-

cause rating is based not only on publicly available information and can give them additional information.

Issuers – owing to rating – get opportunity to deal with wide range of investors, thereby increasing liquidity of borrower’ obligations and, consequently, potentially enabling to decrease cost of borrowing. Financial intermediaries – owing to an existence of credit rating assigned to an issuer – face with simplification of a process of instruments’ placement. In addition, it helps them to promote client in the market.

The rating agencies publish not only international ratings for some developing countries but also ratings presented in the national scales. The main difference is to take – for the international ratings – sovereign risks concerned with insolvency of the state into account. In other words, it is necessary to include into the calculations direct or indirect influence of this factor on the level of solvency of a company. The sovereign rating is a ceiling for the companies’ rating in some or other country. The ratings differ also depending on the period of coverage (they can be short-term and long-term). The types of ratings assigned by the international agencies presented in the Table 3.

Table 3

Typical ratings of the international agencies

Rating	Rating agency		
	Moody's	S&P	Fitch
Long-Term Credit (of Deposits)	+	+	+
Short-Term	+	+	+
Financial Strength	+		+
Bond Issues	+	+	+
Corporate Governance	+	+	
Support			+
By the National Scales	+	+	+

3. Ratings in Russia

In Russia market of rating services is still emerging. At the same time, development of stock market and equity raising activity of increasing quantity of industrial firms, insurance companies, pension funds and investment companies creates demand for rating products.

During the last years a role of the Russian rating agencies have decreased, to a some extent, due to expansion of the international agencies such as Moody’s, S&P, Fitch in Russia. At the same time, in some cases the Russian agencies continue to play important role. We can point

out the following agencies: “Expert RA”, “RusRating”, IC “Rating”, AK&M, IA “Mobile”, the National Rating Agency.

The Russian rating agencies can focus only on companies with average sales volume. The point is that small volume of sales does not create needs of rating; on the other hand, big firms are inquired by the international agencies. Furthermore, the international rating agencies in Russia do not deal with some types of financial companies (for example, non-governmental pension funds and depositaries) so far. The quantity of international agencies ratings according to the Russian scale increases gradually (in recent times the quantity of Moody’s Interfax ratings has exceeded 100).

A few Russian companies have international ratings. However, the quantity of such companies increases quickly. Since 2003 the number of agents getting ratings of some of the three leading agencies has increased almost 3 times (Figure 2).

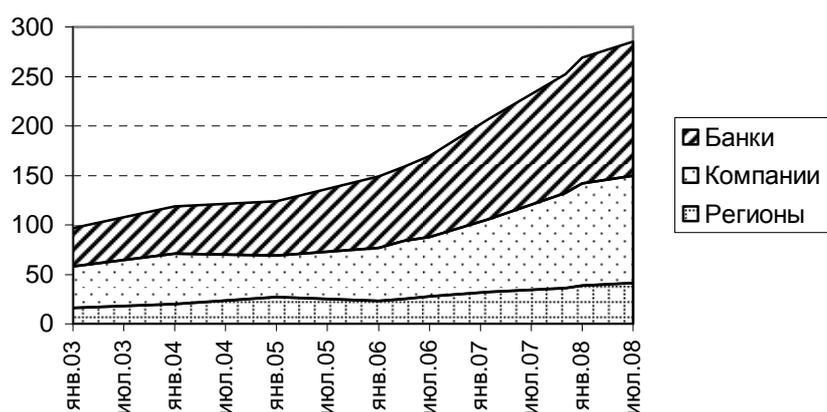


Fig. 2. The quantity of ratings of the Russian economic agents

Notes:

Банки - Banks

Компании - Companies

Регионы - Regions

янв. - January

июл. – July

The quantity of ratings assigned by each of three main agencies increases (Figure 3). The number of Moody’s ratings is characterized by the greatest growth: since 2003 quantity of the Russian companies having ratings of this agency has increased almost 4 times. Many of these companies are financial ones. These are mainly banks. The number of such banks has reached 100; it is approximately 60% of ratings assigned by this agency. In addition, about 75% of 135 Russian banks and financial companies having ratings assigned by some of the three international agencies are clients of this agency. There are companies which received several international

ratings, and in the middle of 2008 the number of companies, banks and regions having ratings assigned by all three main agencies has exceeded 30.

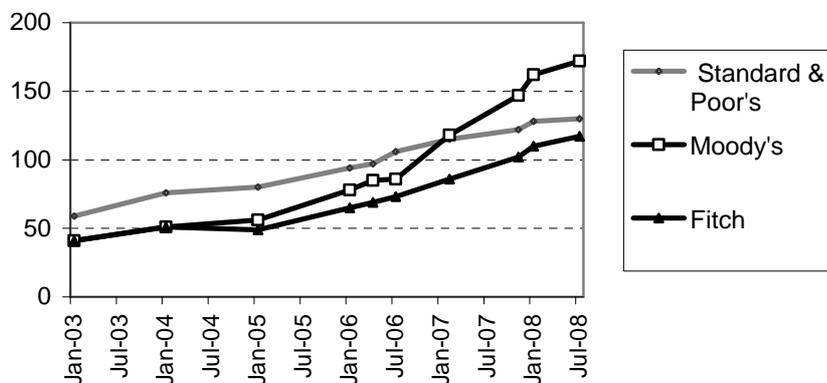


Fig. 3. The increase of the quantity of ratings assigned by the rating agencies in Russia

In recent times (2005 - June 2008), ratings of the Russian companies increased together with positive dynamics of the national economy. One of the main determinants of increasing Russia' and Russian companies' ratings is almost total completion of the former USSR debt re-payment to Paris Club in 2006. The current indicators and dates of the last increases of sovereign ratings are in Table 4.

Table 4

The ceilings of the Russian ratings (June 2008)

Agency	Date of rating as-signing	Rating	
		In foreign currency	In national currency
Standard & Poor's	September 2006.	BBB+	A-
Fitch Ratings	August 2006.	BBB+	A-
Moody's Investors Service	May 2006	Baa2 – for banks A2 – for borrowings	A1

4. Bank ratings assigned by Moody's Investors Service

Let consider – by using an example of Moody's rating agency – special features of the rating methodology – regarding the banks as the most often rated agents in Russia at the present time.

Moody's agency publishes wide *range of ratings* and studies encompassing corporate and government obligations, and also financial assets characterized by the complex structure (includ-

ing complicated time aspects). The total sum of indebtedness compatible with credit ratings supported by the agency is approximately \$ 100 trillions for the ten thousand corporate and government securities in more than 100 countries. In Russia this agency' activity is characterized by rapid increase of quantity of the ratings namely in the banking sector.

The main products (Moody's, 2004) are long-term and short-term bank deposit ratings (DR) and issuers; long-term ratings of bonds and preferred stocks; and also bank financial strength ratings (BFSR) and ratings of corporate governance.

The Russian banks have ratings of both deposits and financial strength. In Russia 16 banks had ratings of investment level in the middle of 2008. These banks are supported by the governments, big companies with government participation, or large foreign banks. Many Russian government bonds have also ratings of investment level. It opens wide possibilities of attracting long-term investment that is extremely important for the national economic development.

The *bank financial strength rating* determines basic credit estimate of a bank as an independent entity. The BFSR scale varies from "A" (the highest) to "E" (the lowest). There is usage of modifiers "+" and "-" in order to mark out banks in the low or in the high parts of the categories. The distribution of BFSR (regarding the banks from all countries) depending on the ratings' categories by the beginning of 2007 is depicted by Figure 4.

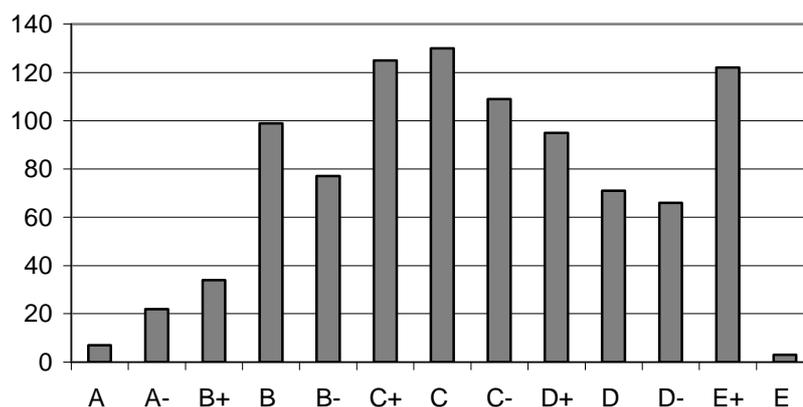


Fig. 4. The distribution of BFSR depending on the ratings' categories

The quantitative instruments play important role in the rating process. Such instruments are financial indicators, models of market, prognostic rating models, and models of default prob-

ability. At the same time, the existing differences are determined, to a considerable extent, by an account of the qualitative factors. In order to improve understanding of a rating process the agencies publish periodically detailed financial statistics, results of models' usage, and special features of the rating methodology.

In 2006 – 2007 Moody's agency have reconsidered methodology and introduced *Joint Default Analysis* (JDA) Approach. It includes an estimate of likelihood of simultaneous default of a few agents supporting rated company or instrument (Moody's, 2006).

The new approach evaluates explicitly intrinsic financial strength of the bank (namely, BFSR) together with an account of factors of its support by the government or by some or other partner. The used indicators are formalized as much as possible in order to provide more consistency of the methodology.

According to the JPA methodology, the main elements of DR determination (Figure 5, Moody's, 2006)) include the following ones:

- the basic (stand-alone) measure of risk is a financial strength rating;
- the probability and size of external support are estimated;
- the probability of an absence of payments' delay with regard to bank obligations is estimated.

Deposit rating assigning contains two steps. At first, there is a determination of BFSR on the base of objective financial indicators of a bank and external environment data (market conditions, macroeconomic performance etc.); subsequently, there is determination of deposits' rating on the base of BFSR with an account of external support of a bank, and also currency risks.

The agency has elaborated scorecard in two variants, for mature and developing markets. Usage of such scorecards provides more formalization and specifies elements of rating estimates which can be determined more precisely by a rating committee with use of informal considerations. It is necessary to note more weight of qualitative indicators for the banks from developing countries. It is explained by higher volatility of the emerging and developing markets, and also by relatively weak supervision in the financial sphere.

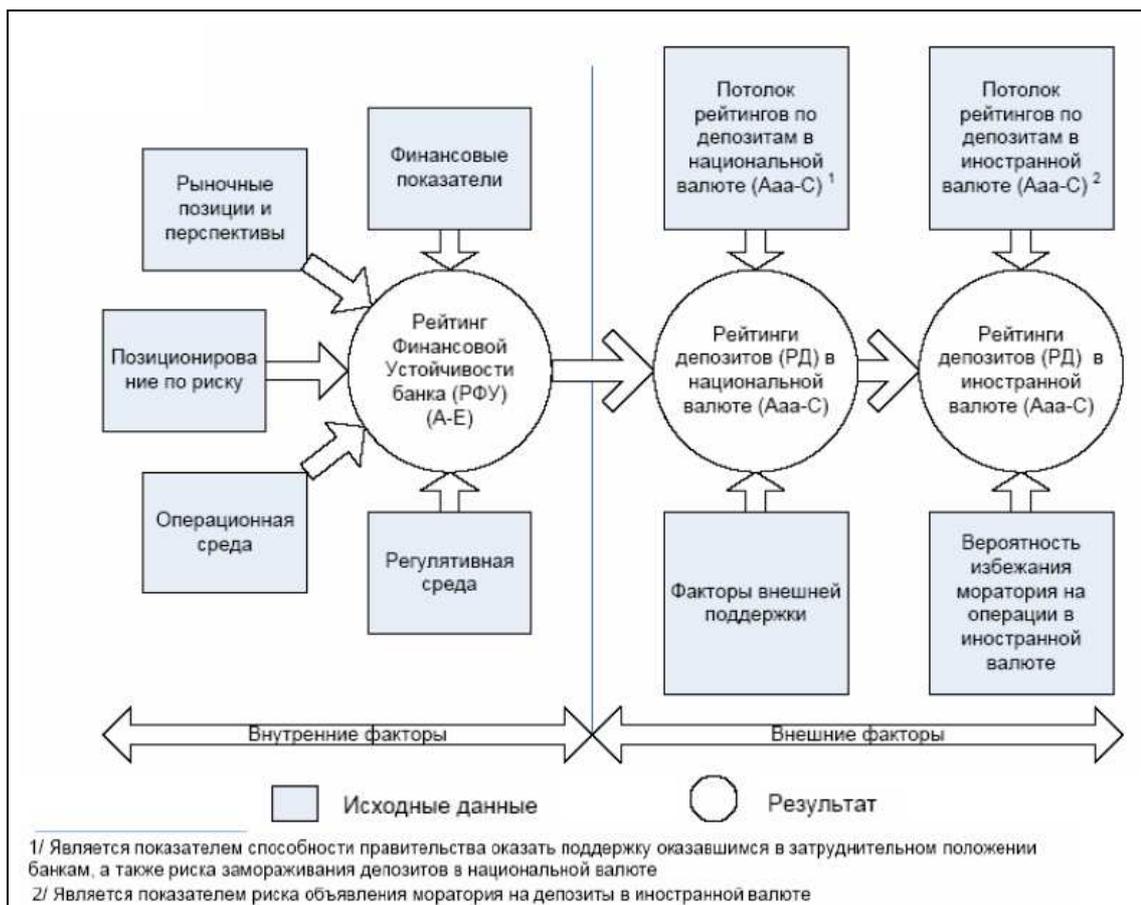


Fig. 5. The diagram of rating assigning by Moody's Investors Service

Notes:

Внутренние факторы - Intrinsic Factors

Финансовые показатели - Financial Fundamentals-

Рыночные позиции и перспективы - Franchise Value

Позиционирование по риску - Risk Positioning

Операционная среда - Operating Environment

Регулятивная среда - Regulatory Environment

Рейтинг финансовой устойчивости банка (А-Е) - Bank Financial Strength Rating (BFSR) (A – E)

Внешние факторы - External Factors

Потолок рейтингов по депозитам в национальной валюте - Local Currency Deposit Ceiling (Aaa – C)¹

Потолок рейтингов по депозитам в иностранной валюте - Foreign Currency Deposit/Debt Ceiling (Aaa – C)²

Рейтинги депозитов в национальной валюте - Local Currency Deposit/Debt Ratings (Aaa – C)

Рейтинги депозитов в иностранной валюте - Foreign Currency Deposit/Debt Ratings (Aaa – C)

External Support Factors

Probability of Avoiding Foreign Currency Moratorium

Исходные данные - Input

Результат - Output

^{1/} Measures ability of a government to support troubled banks and the risk of a local currency deposit freeze.

^{2/} Measures the risk of a foreign currency deposit or foreign currency debt moratorium.

The risks divided into general and specific ones. The general risks characterize the banking system in general. An existence of substantial threats in relation to the national banking system can exclude assigning of high BFSR categories to all banks of this country (in particular, it is important also for Russia).

The methodology supposes that an integral estimate should be received. Such estimate is deduced – on basis of the sub-factors - from five key factors: franchise value, risk positioning, regulative environment, operational environment, financial fundamentals. In respect to each of these factors there are descriptions of compliance with BFSR level (from A to E). As a rule, the data are averaged over three years in order to soften cyclicity.

In particular, financial fundamentals include profitability, liquidity, capital adequacy, efficiency, asset quality. An evaluation of franchise value takes also various factors into account. These factors are a company's market share and sustainability, its geographical diversification, earnings stability, and also earnings diversification. In estimating risk positioning the methodology focuses on corporate governance, controls and risk management, financial reporting transparency, credit risk concentration, liquidity management, and market risk appetite.

It is especially necessary to go into detail on the issue of stability of rating estimates. On the one hand, investors criticize an existing system of rating assigning owing to its insufficient timeliness. An emergence of new information about rated agent/instrument does not have immediate effect on its rating. Therefore investors are compelled to rely upon the old indicators. Moreover, the quality of such indicators is determined from results of auditing and is not part of a competence of a rating agency.

On the other hand, the rating agencies must examine a company thoroughly in order to get objective estimate of its current state and prospects of its development. It requires not only examination of current state of agent/instrument but also tracing of tendencies in its development. In this respect, the rating agencies approach a question of ratings' change carefully. They tend to avoid its frequent changes and all the more so recall of assigned ratings by means of use of the above mentioned "through-the-cycle" methodology (Altman and Rijken, 2004).

The newly introduced methodology (Moody's, 2007) enables to provide more stability of ratings and since 2007 is actively applied by Moody's agency.

5. Distance ratings in the risk management system

Use of ratings is strongly limited by the fact that not all economic agents have ratings (especially in the countries with developing economies including Russia). Furthermore, ratings are characterized by very big intervals of actualization. It is not always acceptable due to high volatility of the economic conditions. In such cases econometric models of ratings can be applied. Such models use distance analysis of economic agents (Altman, 1968; Sahajwala and Van den Bergh, 2000).

Models of rating can be interesting for both bodies of banking supervision (for current monitoring of the banking system conditions) and banks (due to possibility of risk determination by means of using the contractors internal ratings based (IRB) approach) according to the Basel-II Committee (Basel, 2004)). In such cases there is an application of prognostic models. These models use distance analysis of economic agents. It is necessary to note that such models are potentially interesting also for rating agencies themselves owing to both monitoring activities and development of the risk management systems.

The New Basel Committee (Basel-II) determines additional needs concerned with forming and substantiation of internal ratings for solution of risk-management typical problems, in particular, with use of publicly available information (Basel, 2004). The selection of the company performance indicators which are most important for rating assigning is interesting. An evaluation of the models prognostic power is also interesting. Such models are especially significant for emerging markets where only small quantity of companies have ratings assigned by the rating agencies.

References

- Karminsky A.M., Peresetsky A.A., Petrov A.E.** (2004). *Reitingi v ekonomike: metodologiya i praktika*. M. Finansy i statistika.
- Karminsky A.M., Fal'ko A.E., Zhevaga A.A., Ivanova N. Y.** (2006). *Kontrolling*. M. Finansy i statistika.
- Altman, E.I.** (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy // *Journal of Finance*, 23, 589-609.
- Altman, E.I., and Rijken, H.** (2004). How rating agencies achieve rating stability // *The Journal of Banking and Finance*, 28, 2679-2714.
- Altman, E.I.** (1989). Measuring corporate bond mortality and performance // *Journal of Finance*, 44(4), 909-922.
- Basel Committee on Banking Supervision** (2004). International convergence of capital measurement and capital standards. A revised framework. Basel: Bank for International Settlements.

- Cantor, R., and Packer, F.** (1995). The credit rating industry // *Journal of Fixed Income*, 5(3), 10-34.
- Cantor, R., and Packer, F.** (1997). Differences of opinion and selection bias in the credit rating industry // *The Journal of Banking and Finance*, 21, 1395-1417.
- Ederington, L.** (1986). Why split ratings occur? // *Financial Management*, 15, 37-47.
- Hamilton, D.T.** (2002). Historical corporate rating migration, default and recovery rates. In *Credit ratings. Methodologies, rationale and default risk*. Editor M. Ong. London, Risk Books. Pp.17-44.
- Jewell, J., and Livingston, M.** (1999). A comparison of bond ratings from Moody's, S&P and Fitch // *Financial Markets, Institutions and Instruments*, 8(4), 1-45.
- Kish, R.J., Hogan, K.M., and Olson, G.** (1999). Does market perceive a difference in rating agencies? // *The Quarterly Review of Economics and Finance*, 39, 363-377.
- Livingston, M., Naranjo, A., and Zhou, L.** (2007). Asset opaqueness and split bond ratings // *Financial Management*, 36, 49-62.
- Livingston, M., Naranjo, A., and Zhou, L.** (2008). Split bond ratings and rating migration // *The Journal of Banking and Finance*, 32(8), 1613-1624.
- Mishkin, F.S., and Eakins, S.G.** (2006). *Financial Markets and Institutions*. Addison-Wisley.
- Moody's Investors Service** (2004). Moody's ratings symbols and definitions.
- Moody's Investors Service** (2007). Incorporation of joint-default analysis approach into Moody's bank ratings: a refined methodology.
- Moon, C.-G., and Stotsky, J.G.** (1993). Testing the differences between the determinants of Moody's and Standard & Poor's ratings: An application of Smooth simulated maximum likelihood estimation // *Journal of Applied Econometrics*, 8(1), 51-69.
- Morgan, D.** (2002). Rating Banks: Risk and Uncertainty in an Opaque Industry // *The American Economic Review*, 92(4), 874-888.
- Partnoy, F.** (1999). The Siskel and Ebert of financial markets?: Two thumbs down for the credit rating agencies // *Washington University Law Quarterly*. 77(3), 619-715.
- Poon, W.P.H.** (2003). Are unsolicited credit ratings biased downward? // *Journal of Banking and Finance*, 27, 593-614.
- Roy, van P.** (2006). Is there a difference between solicited and unsolicited bank ratings and, if so, why? *Working paper 79*. National Bank of Belgium.
- Sahajwala, R., and Van den Bergh, P.** (2000). Supervisory risk assessment and early warning systems. *BIS Working Papers*. N.4.
- White, L.J.** (2002). An analysis of the credit rating industry. In *Credit ratings. Methodologies, rationale and default risk*. Editor M. Ong. London, Risk Books. 17-44.

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