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ROLE, INTERESTS AND CRITICS OF CREDIT RATING AGENCIES

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Abstract:

Key role of credit rating agencies is reducing the asymmetry information about credit quality (of governments, business entities or securities) between issuers and investors, and ensuring a common standard of measuring the creditworthiness. Credit rating agencies are engaged in the sale of opinions about creditworthiness in the form of an alphabetical letter or symbol, which represents a unique ranking. Their opinion is not a guarantee, but it largely dictates the costs and the profits in the financial markets. This work shows the influence of credit rating agencies to investors and publishers, and their role as market regulators. Conflict of interest is a fundamental problem, which is caused by their way of doing business, it arises from their two main objectives: profit and market regulation, which will be explored in the work. Looking back in history credit rating agencies often selected goal of making a profit at the cost of market regulation, therefore they have caused the collapse of the market, and founded themselves criticized by the public.

Keywords: credit rating agencies, investment grade, creditworthiness

JEL classification: G24; G28

INTRODUCTION

The purpose of credit rating agencies is to offer investors valuable information about the countries, businesses entities and securities for funding. Credit rating agencies have appeared from investor's needs. Due to the lack of of quality and objective information, there was a need that has arisen to start objectively measure the creditworthiness of countries, businesses entities and their securities in order to make the right decision about investing. Another important function was to provide standard of comparison and rating scale, from which they could build a portfolio of securities. From these two last specified functions, need arose to ensure a common standard that will help future investors, creditors and others making decisions. Ensuring common standard, credit rating agencies reduce the information asymmetry in the capital market between publishers and investors.

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According to the BIS (Bank of International Settlements) there are about 130–150 agencies around the world. Many of these agencies are small and focus on particular sectors or particular geographical area. The three best-known credit rating agencies (Standard and Poor's, Moody's and Fitch Ratings) cover more than 90% of the market. Considering the market structure and dominance of the three largest credit rating agencies it can be concluded that they make oligopolistic structure. It is also important to mention that the credit quality ratings of independent states are highly correlated between three biggest credit rating agencies — correlation coefficient is in the range 0,97 to 0,99 (Canuto, Mohapatra, and Ratha 2011, 2). All three credit rating agencies are private equity-owned companies. Standard and Poor's and Moody's are owned by American private equity. Standard and Poor's is a subsidiary of McGraw-Hill, which is one of the leading publishers in the field of economics and finance. French holding company Fimalac owns credit agency Fitch ratings.

Using a wide range of information, credit rating agencies classify with letters or with letter: states, business entities and securities in the categories that vary by level of credit quality, except the letters agencies gave also descriptive marks, which show the expected movement of ratings.

The Asian financial crisis, the fall of the Enron (which received the highest credit rating from credit rating agencies by 2001. just before collapse) and the current global financial crisis are some cases of many where the major cause is incorrect assessment of credit rating agencies. After public criticism, credit rating agencies have found themselves in the center of attention. In 2011th, the European Commission sets the legislative proposals that aim will be regulation of the credit rating agencies.

HISTORICAL EMERGENCE OF CREDIT RATING AGENCIES

Before the credit rating agencies were formed, most information about business entities, had banks. As creditors and signatories emission of securities, they had access to all internal financial information. They had more knowledge than investors who invested in those same securities, which led to the asymmetry of availability of information, and then the occurrence and impact of credit rating agencies proved to be the only logical solution on the financial market.

In the United States credit rating agencies had fundamental purpose of informing investors about the credit quality of newly issued securities. All started with the railway industry, which started in the mid-19th century expanding on the North American continent, including the most developed areas to those undeveloped.

Strong expansion of the railway required a high demand for capital, much higher demand than banks and direct investors could provide. Due to the strong wish to continue expansion, railway and other business entities begun to issuing bonds, from which appeared that investors need to obtain information about debtors and debt instruments. Editor of the American Railroad Journal, Henry Varnum Poor started in 1868 to publish "The Manual of the Railroads of the United States", a publication that contains financial information of railway companies and presents an independent source of business information about companies that have issued bonds. Impact of rating agencies was a significant help in improving the efficiency of capital markets. Standard and Poor's (S&P) was created in 1941 year through the merger Standard

Statistics and Poor's Publishing. Standard & Poor's sells data about valuation, analysis, investments... In order to demonstrate the impact of the company Standard & Poor's it is enough to mention that about 1,5 trillion \$ in assets follows the index S&P 5000 along with the rest of the Standard & Poor's indexes. In 1966, the McGraw-Hill Company has acquired Standard & Poor's furthermore; McGraw-Hill has two more units: Education, Information, and Media Service.

John Moody & Company relying on its own assessments of market needs, published Moody's Manual of Industrial and Miscellaneous Securities in 1900 year, which within two months sold (manual contained statistical information about financial instruments, industries, etc.). When the stock market fell in 1907 Moody was forced to sell his business because he ran out of capital to sustain it, but in the 1909 he returned to the market with a new idea, instead of collecting data on property, management, etc. he offered to investors analyze securities. 01/07/1914 John Moody has registered Moody's Investor Service, in 1924, the business expanded to such an extent that it has rated almost 100% bonds in the U.S. financial markets. During the 1970, he expanded ratings on commercial bills and bank deposits. Ratings assigning, research and risk analysis for a wide range of securities were the majority of business. In 17 offices around the world, they assign ratings to 100 sovereign nations. Moody's as well as Standard and Poor's in the process of analysis and credit ratings is using a combination of quantitative and qualitative factors. Dun & Badstreet bought Moody's in 1962 year. Today, the Moody's is structured as a holding company. In 2011, Moody's reported revenues of \$2.3 billion and employs approximately 6.100 people around the world.

The third largest credit rating agency Fitch Ratings rates and analyzes over 75 countries. Two main offices are located in New York and London, except them Fitch has 51 offices worldwide and counts over 2.000 employees. Fitch started with credit ratings in 1924. Similar as other agencies, Fitch covers a wide range of debt securities issued by corporations, financial institutions, governments, insurance companies etc. in 1997 The Fitch Ratings has completely taken over by a holding company Fimalac.

ROLE AND OBJECTIVES OF CREDIT RATING AGENCIES

The main activity of credit rating agencies is selling the reviews as a single score that measures the credit quality of securities, business entities or governments. It is important to determine the distinction between the concepts of investment and advisory opinions. Credit rating agencies do not provide investment advisory services in terms of recommendations for sale or purchase of securities, they provides an opinion on the creditworthiness of the publisher or securities. Investors should be aware that the assessment of the risk is not a guarantee, but only opinion about publisher's creditworthiness (ability to meet debt obligations). Evaluation and opinion are based on analyzes of experienced professionals who evaluate and interpret the information received from publishers and other sources which are considered reliable. Each credit rating agency with own individual methodology analyzes and measures the creditworthiness and with specific scale publish credit ratings, the ratings are supported by opinions of experts. Investors often use credit scores, so they can compare credit quality among various publishers, and thereby bring the most cost-effective investment decision. Information that are used in the analysis are current and historical, but they

estimate the potential impact of predictable future events, since events can't be with 100% confidence predicted. Generally the credit rating agencies rely on quantitative and qualitative methods, only a small number of credit rating agencies uses only quantitative methods. Assigning credit ratings is not an exact science, nor guarantee the credit quality or exact measure of the like hood that each publisher will pay its debts. Instead of that, score makes opinion about credit quality of an individual business entity or financial instrument and investor bears the ultimate responsibility.

The objectives of the new policy of credit rating agencies, according to their public address at the official site, will consist in increasing transparency, greater investments in education, in encouraging investments in research and development of modern methods of analysis and audit of financial statements and the protection of independence and quality of future rating score.

Below is a table with letters that signify investment grades. With these marks for individual classes can be added numbers one to three, and signs (+) and (–) denote the states, business entities and securities with (+) or number 1 belong to upper level, with number 2 or without symbol central level and number three or (–) denotes lower rank (Ivanovic 1997, 408).

Table 1. Rating scale Standard & Poor's, Fitch ratings i Moody's

	Standard & Poor's	Fitch	Moody's
<i>Investment grade</i>			
The highest credit quality	AAA	AAA	Aaa
Very high credit quality	AA+	AA+	Aa1
	AA	AA	Aa2
	AA-	AA-	Aa3
High credit quality	A+	A+	A1
	A	A	A2
	A-	A-	A3
Good credit quality	BBB+	BBB+	Baa1
	BBB	BBB	Baa2
	BBB-	BBB-	Baa3
<i>Speculative grade</i>			
Speculative	BB+	BB+	Ba1
	BB	BB	Ba2
	BB-	BB-	Ba3
Highly speculative	B+	B+	B1
	B	B	B2
	B-	B-	B3
Credit risk	CCC+	CCC+	Caa1
	CCC	CCC	Caa2
	CCC-	CCC-	Caa3
Very high credit risk	CC	CC	Ca
	C	C	C

Above classification does not suggest buying or selling securities. Neither credit rating agencies can advise potential investor, they only rank according to criteria of potential financial risk. However, generally speaking, the first four ranks are financial instruments with investment character, while other financial instruments are troubled

character, so they are often called as “junk, low rank or speculative securities” (Ivanovic 1997, 408).

As a rule when it is talking about securities creditworthiness, better credit rating of state or business entity or security is associated with a lower interest rate and vice versa — worse credit rating implies higher interest rate to compensate credit risk and attract investors. Publishers engaging the credit rating agencies to assess the credit rating are a source of income for agencies, but they have also the opportunity to engage them in pre-advice in order to improve its rating before the evaluation of credit quality.

During seventies SEC (Security and exchange commission) introduces nationally recognized statistical rating organization (NRSRO). NRSRO is a regulatory license that presents key that unlocks the financial markets (Partnoy and Barrett 2009, 2).

Credit rating agencies earn from assigning ratings, which further unlocks the market to continue operating regardless of its objectivity. The agency, which is registered as an NRSRO, is considered to be nationally recognized in the United States as an agency that provides reliable and credible ratings. As soon as the SEC (Security and exchange commission) issued a decision about the NRSRO, three largest credit rating agencies (Standard & Poors, Fitch Ratings and Moody's) registered right away. NRSRO found themselves under critics, because of their role they played in global crisis. No criteria were set for the NRSRO, which was like a border in front of all credit rating business till 2006 (Sinclair 2010,103). Only a month earlier S&P, Moody's and Fitch assign high investment grades to financial institutions that have already begun to sink. For example, just one month before the collapse of Lehman Brothers has been categorized as category A, and besides him, there were thousands of securities with AAA category, which were related to the subprime loans that were virtually worthless. In order to show domination by the numbers of three largest sisters below is the SEC's annual report of credit rating agencies registered as an NRSRO.

Table 2. Outstanding Credit Ratings Reported by NRSROs on Form NRSRO by Ratings Class (Securities and Exchange Commission 2011).

NRSRO	Financial Institutions	Insurance Companies	Corporate Issuers	Asset-Backed Securities	Government Municipal & Sovereign	Total Ratings
A.M. Best	3	5.364	2.246	54	0	7.667
DBRS	16.630	120	5.350	8.430	12.400	42.930
EJR	82	45	853	14	13	1.007
Fitch	72.311	4.599	12.613	69.515	352.697	511.735
JCR	156	31	518	64	53	822
LACE	17.263	60	1.000	0	61	18.384
Moody's	76.801	5.455	31.008	106.337	862.240	1.081.841
R&I	100	30	543	186	123	982
Real point	0	0	0	8.856	0	8.856
S&P	52.500	8.600	41.400	124.600	1.004.500	1.231.600
Total	235.846	24.304	95.531	318.056	2.232.087	2.905.824

It is important to note that from following ten agencies, seven of them operate in a way that they charge issuer, and only three—charge investor for their service. In percentage, it means that 99% of total current credit ratings are charged in issuer-pay model.

CREDIT RATINGS AFFECTS THE DECISION MAKING PROCESS

Credit ratings are important when making decisions about raising capital by issuing securities. Changes in credit ratings can result in future costs or profits for a business entity. When talking about the bonds, price sensitivity of bonds can be linked to the maturity of individual bonds, unless the maturity, credit rating changes also affect the bond and may incur increased costs for business entity such as raising interest rates on bonds due to deteriorating of credit rating, raise a question: "What rises interest rate due to deteriorating credit rating on bonds?" The answer to that question is: "Corporate bonds must offer a premium for the risk of default, for the lower quality bonds—investors will demand a higher rate of return that will compensate risk they take."

Movement of premium for the risk of default is sometimes called the risk structure of interest rates. Higher risk of default implies greater risk premium. At a higher interest rate, the present value of the payments to be received by the bondholder is lower. Therefore, the bond price will fall as market interest rise. This illustrates a crucial general rule in bond valuation. When interest rate rises, bond prices must fall because the present value of the bond's payments is obtained by discounting at a higher interest rate (Bodie, Kane, and Marcus 2006, 311).

Credit ratings affect also emission of securities, according to Kisgen (2006, 1036) business entities that are ranked with the symbols + or – issue less debt securities in relation to equity securities than business entities that don't have specified symbols. In other words business entities that are ranked in the first third or last third within the investment grade issue less debt relative to equity securities.

In Croatian capital market, investment funds are considered among the main generators of liquidity. Regulations and statutes determine under which level of credit quality of financial instruments will not invest. According to the regulation of investment criteria for pension funds — pension funds may invest in securities of foreign issuers that are issued by states and non-state actor of the European Union or the OECD, provided that the state has a long-term credit rating for debt issued in foreign currency rating at least equal as the rating of Republic Croatia according to Standard & Poor's or Moody's.

In securities of foreign issuers from those countries that have a lower rating than Republic of Croatia, it is allowed to invest only indirectly via the Croatian issuers, Member States of the European Union and OECD countries up to 5% of fund assets, but not more than 1% of fund assets in individual investments. If the securities are acquired through IPOs or secondary public offerings at least one agent/underwriter newly issued securities must be a financial institution with a minimum rating of A according to Standard and Poor's or A2 by Moody's (Law on Compulsory and Voluntary Pension Funds 2007). Similar rules for investments funds have remained in the Republic of Croatia. For example, according to the statute of the stock fund KD Victoria, fund will mostly invest in stocks of issuers registered in the Republic of

Croatia, and in securities of foreign issuers, public and private entities of the OECD countries, provided that the country has a long-term credit rating for debt issued in foreign currency of at least A category by agency Standard and Poor's or A2 according to the Moody's.

IMPACT ON CROATIAN CREDIT RATING

Ministry of Finance is responsible for preparing and implementing the government's fiscal policy. Its objectives are to contribute to stable economic growth, increasing prosperity and quality of life and employment for all Croatian citizens. Ministry of Finance is a major publisher of government securities, and thus the largest publisher of debt. If budget revenues can't collect a sufficient amount of funds, reaching for the funds in the capital market. Usually the borrowing is done by issuing medium and long-term government securities. The table below shows the credit rating of the Croatian in the period 1997–2011 year (Croatian National Bank).

Table 3. The Credit ratings of Croatia 1997–2011 year

Year	Moody's	S&P	Fitch Ratings
1997	<i>Baa3</i>	BBB-	BBB-
1998	<i>Baa3</i>	BBB-	BBB-
1999	<i>Baa3</i>	BBB-	BB+
2000	<i>Baa3</i>	BBB-	BB+/ <i> positive</i>
2001	<i>Baa3/negative</i>	BBB-	BBB-/ <i> stable</i>
2002	<i>Baa3/stable</i>	BBB-/ <i> stable</i>	BBB-/ <i> stable</i>
2003	<i>Baa3/ stable</i>	BBB-/ <i> stable</i>	BBB-/ <i> positive</i>
2004	<i>Baa3/ stable</i>	BBB-/ <i> stable</i>	BBB-/ <i> positive</i>
2005	<i>Baa3/ stable</i>	BBB-/ <i> stable</i>	BBB-/ <i> stable</i>
2006	<i>Baa3/ stable</i>	BBB-/ <i> stable</i>	BBB-/ <i> stable</i>
2007	<i>Baa3/positive</i>	BBB-/ <i> stable</i>	BBB-/ <i> stable</i>
2008	<i>Baa3/ positive</i>	BBB-/ <i> stable</i>	BBB-/ <i> stable</i>
2009	<i>Baa3/ stable</i>	BBB-/ <i> stable</i>	BBB-/ <i> negative</i>
2010	<i>Baa3/ stable</i>	BBB-/ <i> negative</i>	BBB-/ <i> negative</i>
2011	<i>Baa3/ stable</i>	BBB-/ <i> negative</i>	BBB-/ <i> negative</i>

A large public debt and poor management are the main reasons for low ratings by credit ratings agencies. In order to show on the example of countries how weak indicators affect the low scores on the financial market below is shown a table on a day December 12, 2010 (HANFA RIPE 2012).

Table 4. Comparison of credit ratings and key performance indicators of public debt management

	Public debt % GDP	The budget deficit % GDP	External debt % GDP	The growth rate of GDP (%)	Credit rating (Moody's)
Croatia	55,00	-4,20	99	-1,20	Baa3
Slovenia	35,50	-5,60	108	1,40	Aa3
Hungary	79,60	-4,20	115	1,30	Ba1
Ireland	94,20	-32,40	1.165	-0,40	Ba1
Greece	144,00	-10,40	174	-3,50	Caa2
Portugal	83,20	-9,20	217	1,40	Ba2

From the table above can be concluded that Slovenia has the best credit rating according to the indicators Slovenia and Croatia belong to the investment grade, but further growth of public debt and the decline in GDP will certainly get worse credit rating, which will result in increased premiums to the risk, which will prevent further recovery.

According to Andrijasevic-Matovac and Josic (2010) factors that had most influence on over-indebtedness of Croatian last decade can be divided into endogenous and exogenous. When talking about the endogenous factors, then they certainly include: excessive levels of consumption, excessive import of goods and services, obsolete technological processes, lack of involvement in the Croatian Pan-European system of accumulation origin of goods and unrealistic land development policy is reflected in the excess of investment over savings, leading to exceptionally high need for foreign debt.

Exogenous factors indebtedness of Croatian are: differences in the reference interest rates on borrowing at home and abroad, the overvaluation of the real effective exchange rate and the impact of foreign competition in major export markets. According to the Croatian National Bank's foreign debt in 2010. Accounted for 91,8% of GDP. Since Croatia has developed a very strong dependence on external borrowing it is certain that the worsening of credit rating can cause more progressive rate of growth of external debt and thus deepen the crisis in the country. The chart below shows the correlation between the movement of foreign debt to GDP, where it can be seen that the foreign debt within a certain touch of GDP, which will certainly contribute to the reduction rating, and an additional increase in the interest rate.

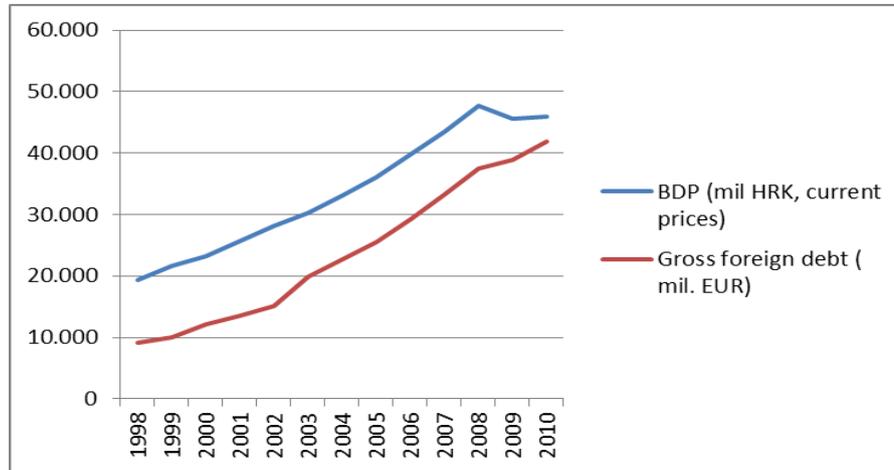


Figure 1. Trends in GDP and Gross external debt in the period 1998–2010

The debt which is in euros denominated last years was gradually increased, and accounts for about 57,5% of total debt. The basic objectives of public debt management strategy for the period 2011–2013 by the Ministry of Finance in February 2011. adopted to: contribution to the stabilization of the public debt to GDP ratio, extending the average maturity of the maturities and reducing the share of short-term debt in total debt, introduction of mechanism to protect from currency risk, the development of yield curve on domestic and external markets and the continued development and improvement of the domestic securities market.

RELIABILITY OF CREDIT RATING AGENCIES

Form of capital that determines the highest future earnings to credit rating agencies and certainly reputational capital. Good reputational capital possess agencies that award the correct credit ratings, agencies are aware of the importance of reputational capital, and they often emphasize its importance whether they gain more clients and achieve even greater profits. Reputational capital results from reliability of credit rating agencies.

The reliability of credit rating agencies is an important condition for economic stability to an extremely large number of investors who rely on the ratings and credit quality explanations of securities, governments and business entities. In recent years, credit rating agencies have found themselves targeted by many critics, mainly because they are considered the main cause of the global financial crisis. From the ratings of credit rating agencies many problems and limitations arisen, for example:

- Insufficient transparency regarding the methodology of determining the credit quality of the governments, businesses or securities.
- At the beginning, rating agencies charged investors for risk evaluation, in the middle of the 20th century rating agencies started charging issuers for ratings of

financial instruments, instead of charging investors; they come into the possibility conflicts of interest.

- In order to eliminate the small but successful competition, largest credit agencies often decide to merge with the goal: achieving even greater profits, and retain a large impact on financial markets.
- The possibility that allows the same rating agencies assign ratings to various issues of securities of the same issuer opens an opportunity for conflicts of interest, especially if they were not involved in previous issues of securities.
- Considering the type of market competition, oligopoly is present in rating agency industry²
- Credit rating agencies are also engaged in consulting on capital structure of individual businesses that once assign a credit rating review, the agency then has the opportunity to earn twice. First time gives advice on how to issue of such securities will affect the credit rating, and then publish a rating that confirms their advice. This situation is only one in a series of situations where is a possible conflict of interest. To defend themselves from the previous argument, the agencies wrote in their prospectus:
"During payment, in order to protect against potential conflicts of interest, it is identified a number of protective measures, inter alia, that a group of business professionals negotiate the terms of the ranking process, and the other group of professionals conduct risk analysis of credit ranking" in fact, there are two groups of people specialized in their work, but it is a one credit rating agency or a joint account for which they work in terms of maximizing profits.
- Credit rating agencies have specificity in their business, and that is, if damage occurs which is caused by a wrong assessment of the agency, the agency doesn't bear legal responsibility.

The biggest problem lies in fact that the primary task of credit rating agencies is to make profit, while they should represent the market regulator. Although their business in recent years is marked by failures, this can't be said for their profits. When we talk about the current global crisis, which was launched by subprime mortgages, it is important to say that the credit rating agencies earned nearly three times as evaluating CDO (Collateral debt obligations) and MBS (Mortgage backed securities) with too high grades, but assessing corporate or government bonds. In case they have been objectively assessed, and haven't donated AAA rating to collateralized debt obligations,

² The question is: "How is oligopoly among credit rating industry made?" United States as one of the biggest advocates of capitalism and free markets allowed that. 70-s SEC (Security and exchange commission) introduced nationally recognized statistical rating organization (NRSRO) in which three largest credit rating agencies (Standard&Poors, Fitch ratings and Moody's) immediately registered which enabled them to obtain more work, because the dealers and brokers prefer more purchases of securities that were rated by credit rating agencies that have registered in the NRSRO. Reasons from which other agencies were rejected, never published, nor formal criteria that must be fulfilled for NRSRO registration. Currently, in the NRSRO are registered only 10 subjects (A.M. Best Company, Inc., DBRS Ltd., Egan-Jones Rating Company, Fitch, Inc., Japan Credit Rating Agency, Ltd., Kroll Bond Rating Agency, Inc., Moody's Investors Service, Inc., Rating and Investment Information, Inc., Realpoint LLC i Standard & Poor's Ratings Services).

the agency wouldn't continue to earn high because the work would stop. Desiring the profit, they continued, and only when it was clear that the ratings were fake — the agency decided to lower them, but then it was already late, the fiasco was inevitable.

CONCLUSION

The purpose of credit rating agencies is to measure objectively the creditworthiness of government, business subjects and securities. The attitudes of credit rating agencies are used as instruments of regulation and supervision of financial markets for which they are paid, in most cases by the publisher of the financial instrument. Due to the conflicts of interests, credit rating agencies are not able to perform their job credibly and objectively. Profit, as the main goal to the credit agencies, was often opposite to interests of market regulation, so the agencies (challenged by profit) awarded ratings to the detriment of objective grades, although they were aware of real situation of a business entity or financial instrument. Credit rating agencies have enormous power in the world of finance by demonstrating their opinions and paying legal responsibility to obtain better information and behavior that is more responsible. However, the way of theirs operating protect them very well, and that is fact way which they use. We can imagine situation in which investor orders a rating of a financial instrument, which they rate wrong and gets earnings on it. What would be the reaction of investor which, in this case, has bought a fake product (wrong categorized security) and realized losses on it, there wouldn't be no opportunity to try seeking compensation from the same credit agency. However, if we imagine different situation, the publisher orders and then pays the credit rating, and earns AA grade, but objectively it's in BBB grade. This situation fits to both, the publisher and the credit agency, but investor loses. If an investor reacts with the complaints, credit rating agencies will defend; justifying that the opinion that it gives can be but don't have to be accepted and it does not sale guarantees. Secrecy of methodology of calculating the credit rating of governments, business entities or securities allows freedom in the creation of grades.

The credit rating of Croatia has not significantly changed since 1997 (only a trend is changed, and it is negative), currently Croatia is in lowest investment grade BBB. Further decline in credit rating Croatia would be in the top of the speculative or "junk" grade, which would lead to increase in interest rates, as well as the more expensive borrowing. The debt would be increased and loans would become more expensive.

REFERENCE

- Andrijevic-Matovac, Vesna, and Hrvoje Josic. 2010. Odrzivost vanjskog duga Republike Hrvatske [Foreign debt sustainability in Republic of Croatia]. *Zbornik Ekonomskog fakulteta u Zagrebu* 8 (1): 193–209.
- Bodie, Zvi, Alex Kane, and Alan J. Marcus. 2006. *Počela ulaganja*. 4. izd. Zagreb: Mate.
- Canuto, Otaviano, Sanket Mohapatra, and Dilip Ratha. 2011. Shadow Sovereign Ratings. *Economic Premise* 63, World Bank.

Baresa, Suzana, Sinisa Bogdan, and Sasa Ivanovic. 2012. Role, interests and critics of credit rating agencies. *UTMS Journal of Economics* 3 (1): 71–82.

- HANFA RIPE [CFSSA — Regulatory Information and Publication Service]. 2012. Kreditni rejting i obvezni mirovinski fondovi. Zagreb: HANFA RIPE. http://www.ripe.hanfa.hr/repository_files/file/1311/ (pristupljeno 20.02.2012)
- Hrvatska narodna banka [Croatian National Bank]. Kronološki prikaz rejtinga Republike Hrvatske. <http://www.hnb.hr/> (accessed January 25, 2012)
- Ivanovic, Zoran. 1997. *Financijski menadzment* [Financial Management]. Rijeka: Sveuciliste u Rijeci.
- Kisgen, Darren J. 2006. Credit Ratings and Capital Structure. *Journal of Finance* 61: 1035–1073. <http://dx.doi.org/10.1111/j.1540-6261.2006.00866.x>
- Partnoy, Frank, and George E. Barrett. 2009. Rethinking Regulation of Credit Rating Agencies: An Institutional Investor Perspective. *Council of Institutional Investors* (April 2009): 1–20.
- Securities and Exchange Commission. 2011. Annual Report on Nationally Recognized Statistical Rating Organizations. Washington: Securities and Exchange Commission. <http://www.sec.gov/divisions/marketreg/ratingagency/nrsroannrep0111.pdf> (accessed February 02, 2012)
- Sinclair, Timothy J. 2010. Round Up the Usual Suspects: Blame and the Subprime Crisis. In The Political Economy of the Subprime Crisis: The Economics, Politics and Ethics of Response. Specijal issue, *New Political Economy* 15 (1): 91–107.
- Zakon o obveznim i dobrovoljnim mirovinskim fondovima*. 2007. Narodne novine. <http://narodne-novine.nn.hr/> (accessed February 14, 2012).