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Country risk – conditions and trends in Macedonia, proposals for reduction in conditions of unstable environment

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Abstract

Having in mind globalization and financial integration, country risk analysis has become extremely important for the international creditors and investors. This paper briefly discusses the concepts and definitions, its basic components, and presents a survey of some quantitative methods that are used to address various issues related to country risk. It also gives a summary review of selected key elements needed in assessing the country risk. Further the paper stress some of the basic indicators for assessment of the country risk (The Debt Service Ratio, Import Ratio, Investment Ratio, VAREX-Variance of Export Revenue, Domestic Money Supply Growth), and their indicative calculation for Macedonia, based on relevant available data. Than follows an overview of basic macroeconomic indicators in Macedonia that are included in the calculation of country risk, and through which an attempt is made to monitor and predict changes in risk exposure of Macedonia in the 2007-2014 period. Proposals for possible reduction of the Macedonia risk exposure in terms of unstable environment are moving toward determination of the underlying strengths and weaknesses of the Macedonian economy, and in direction of developing strategies for promotion of the advantages and reducing the vulnerabilities. That is in order to change the perception of Macedonia in the immediate and wider environment and to attract foreign direct investments and various other forms of investment in the country. Shortly, the goal of the paper is to point the importance of country risk assessment, to determine and compute the basic indicators of country risk in Macedonia, and having in mind those indicators and main macroeconomic indicators to suggest some strategies for its reduction.

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1. Introduction

Country risk refers to the problems that financial institutions and other businesses face when investing in other countries. It is a complex and specific risk relating to the country (borrower or home country of the borrower of the loan) as a whole. Approval of loans to foreign entities in each case is more risky than loans approved in the country, due to a number of reasons of legal, economic, security or any other character. Although the complex of these risks can be covered by the term country risk, another form of risk associated with granting loans abroad, although a similar but not identical with country risk can be identified as a risk to sovereignty (sovereign risk). This form of risk occurs when the government of a country takes measures that jeopardize repayment of international loans, which may be non-recognition of liabilities in foreign debt, appropriation of private property, suspension of payments on loans for some time to preserve foreign exchange reserves of the country and so on.^b It is a risk arising from foreign governmental restrictions or prevention of domestic borrowers to repay principal and interest on debts to foreign lenders. For these reasons, the financial institution or other business entity that decides to approve a loan abroad has to analyze a single borrower, and the state government in which the borrower is resident. All business transactions involve some degree of risk. When business transactions occur across international borders, they carry additional risks not present in domestic transactions. These additional risks, called country risks, typically include risks arising from a variety of national differences in economic structures, policies, socio-political institutions, geography, and currencies. Country risk analysis (CRA) attempts to identify the potential for these risks to decrease the expected return of a crossborder investment

The risk assessment of the country has its own micro-and macroeconomic aspects. The first case is to assess the risk of a financial transaction or investment, where as the borrower (debtor) or the subject of investment appears an economic entity (enterprise, company, financial institution) from a certain country, while the other is to determine the risk of an investment in a particular country or creditworthiness and security of the country as a debtor. The main objective of assessing the risk of investing in a particular country is to provide as comprehensive and accurate knowledge of the country that will be placed the capital or invest in direct investments. Therefore, when analyzing the risk of credit transactions between residents of different states should be made an essential difference between: credit risk, country risk, sovereign risk and transfer risk. The riskiness of state sovereignty represents one specific aspect of country risk which combines the functions of the country as borrower or guarantor on loans, according to which there is a possibility of its immunity in respect of any proceedings of a judicial nature to settle claims. Of course the sanctions for such things exist and can occur in the form of excluding a country from the international capital market. Risk transfer occurs in situations in which, despite its solvency in general business and financial terms, the borrower is unable to reconciling the debt in a specific currency (to transfer funds abroad) due to systemic and other general restrictions on the availability of that currency (General moratorium on payments abroad, the prohibition of certain cash transfers) which imply the inability to reach a foreign currency required to repay debt or to perform any other obligation (the transfer of dividends, repatriation of capital, etc.)

^b Rose S. P., Hudgins C. S. (2005). *Banking management and financial services*. The McGraw-Hill Companies, Inc., translate: Data Status, Belgrade, (pp. 724)

This paper is intended to analyze the situation and future trends of country risk for Macedonia, and to propose directions for reduction of its risk exposure in terms of an unstable environment, which is an additional aggravating factor. In that sense, the paper analyzes, determines and computes the key components and main indicators of the CRA for Macedonia, and considers the main macroeconomic indicators of the country as the basis for the calculation of country risk and makes recommendations for its reduction.

2. Key components of the analysis of country risk

The procedures and methods of analysis and country risk measurement have certain similarities with these for individual economic entities risk measurement, but techniques for the analysis of country risk are less developed than these for companies risk analysis and there was no generally accepted analysis method. Financial institutions and other businesses that plan financial investments outside their country may use outside services for evaluation or develop their own internal models to measure the risk of the country in which they plan to invest. Financial institutions that perform the measurement of country risk analyzed groups of factors through appropriate methodology for collecting data and qualitative and quantitative processing and publish an index or rating of the analyzed countries. The final assessment may be a combination of many external and internal models that are not mutually exclusive. In that process can be analyzed a number of different factors that determine country risk, and which will be the starting basis and which of then will be especially stress depends on the analyzed country and on the institution that perform the analysis.

While analyzing the factors that condition the country risk it is necessary to include the political stability and political climate in the country by assessing the stability and credibility of the governance structure of the state. The political stability of the country is simply evaluated through mechanisms for peaceful transfer of power, the stability of the government institutions, accepting obligations that were undertaken by previous governments and timely execution to foreign creditors, etc. The political climate is judged by the general mood for retaining or changing the existing governance structure, which depends largely on the care or negligence for the reelection or special urging or not urging of the authorities on the economic performance in the election years. Especially as important indicators of the government success and the political climate in the country can be used indicators of inflation, for the number and structure of the unemployed, for the statement of balance of payments and so on. All these indicators can cause certain reactions of the electorate, even to the unions and can be cause for political, economic or social unrest affecting the political climate in the country, and whose assessment is a great deal of subjectivity.

Other important factors that are analyzed while measuring the risk of the country are the *country's foreign-financial position* and *external debt* which can relatively easily be measured and quantified in terms of the previous factors. It involves a detail analysis of the balance of payment, of the indicators for import and export, financial transactions of payments to abroad, the dependence on foreign suppliers of raw materials, especially regarding the reliability of energy supplies from abroad, opportunities for import substitution etc. The external debt on the other hand is one of the main indicators of the level and the extent of economic development as well as of the degree of dependence on the national economy from foreign creditors, which substantially affects the business decisions for investing or non-investing of foreign capital in the mother country. The analysis of country risk covers the *management of debt* through the use of revenues from foreign investment for servicing the external debt and balancing the external debt, as well as through the use of facilities financed by foreign capital for substitution of the import. The

measurement of country risk includes *the assessment of the natural resources* as potential for development, the natural resources and the level of their optimum exploitation, as well as the human potential and the level of education and qualifications, salaries of employees and other non-financial incentives to increase their productivity. An important element of country risk is the *degree of development of technique and technology, industrialization and automation* of production which is especially important for underdeveloped countries and developing countries.^c

Most commonly used approach for assessing the country risk by the largest financial institutions is to develop models based on key economic ratios for each country, similar to models for assessing credit risk of individual entities. The analysts of the financial institutions start with a selection of several macroeconomic and microeconomic variables and proportions that may be important in explaining the probability the country to ask reprogramming of debts. Then the analyst compares the previous data for countries that made the reprogramming and countries that timely paid up the debts, in order to separate the variables through which the differences between them are most evident. Thus quantifies the relative importance of different variables that will be used in the model.

The methodology of collecting and processing necessary information for the analysis of country risk and the degree of reliability of the collected data greatly depends on the promptness and accuracy of the national institutions that present those data. Despite the general assessment that in modern conditions the reliability of sources of information is improving, there are major differences in terms of speed, accuracy and reliability of information and statistical data that are presented in separate national economies. The developed countries publish comprehensive data and information, relatively quickly and fully adapted to seasonal movements. In contrast to them, the less developed countries publish a smaller number of information, often as late data, which generates considerable room for doubt and mistrust by potential investors. Also for measurement of country risk can be used data and information published by international institutions that with their credibility stand behind their quality, such as the World Bank, IMF, Bank for International Settlements in Basel and other international financial institutions. The collected data are processed by any of the methods available, including:^d

- quantitative method;
- qualitative methods;
- method of lists (check list); and
- structural qualitative method.

Risk assessment of individual countries by specialized institutions is done by using some of the above methods, but mostly through the combined use of two or three of them, where decisive moment is the right choice of parameters that should be assessed and inserted in the model.

c Karadzova V. (2006). Risk Management in Insurance. CNIR FTU, Ohrid, (pp. 197)

d Arsovski D. (1998). Risks in banking. Economy Press, Skopje, (pp. 82)

3. Main indicators of country risk for Macedonia

Considering that the analysis of numerous indicators used in assessing the country risk far outweigh the spatial capacity of this paper, this section will identify some of the variables that are commonly included in models for the country risk assessment.^e

The Debt Service Ratio

$$DSR = \frac{\text{interest + debt amortization}}{\text{export}} \tag{1}$$

(2)

Total debt service (% of exports of goods, services and income) is the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the IMF. Export as a primary means of generating foreign currencies is correlated with the ability to settle debts. The amount of repayment of debt in relation to earnings from export indicates the probability of payment delay.

The external debt position of Macedonia is precarious. Gross external debt has increased from USD 3.3 billions (52% of GDP; 109% of exports) at end of 2006 to USD 5.5 billions (61% of GDP; 188% of exports) in Q3 2010 and is forecast to rise further. The external debt-service ratio of some 14,5% in 2010 and forecast at 12,5% in 2011 appears manageable, though is has risen from just 9,1% in 2008.^f According World bank data for Macedonia for this indicator from 2006 to 2009 it is: 18,0; 16,1; 9,1 and 14,8 for 2009.^g According the targets set in the Strategy for Public Debt Management of the Republic of Macedonia for the period 2010-2012, the ratio between the total public debts to GDP should not exceed 40%, and the ratio between government debt and GDP should not exceed 30%.^h

Import ratio

$$IR = \frac{\text{total import}}{\text{total foreign currency reserves}} = \frac{4.119}{1.714} = 2,40$$

e Saunders A. and Allen L. (2002). Credit Risk Measurement: New Approaches to Value at Risk and Other Paradigms, (2nd. ed.). John Wiley and Sons, New York

f Hermes E. Kreditversicherungs-AG. (2011). COUNTRY REVIEW Macedonia, FYR

g http://data.worldbank.org/indicator/DT.TDS.DECT.EX.ZS?display=default

h Ministry of finance, Sector for Public debt Management. (2010). Report on the public debt of the Republic of Macedonia for the first quarter of 2010, Skopje

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(According to the State Statistical Office of Republic of Macedonia the total imports in RM for 2010 is 4.119 million euros and 2.424 million euros for the first six months of 2011. According the Report of the Research Department of National Bank of R. Macedonia for 07/2011 published in August 2011, the total foreign currency reserves of the Republic of Macedonia at the end of July are amounted to 1.811,4 million euros and realize a cumulative growth of 97 million euros).

Calculated indicators show that at the end of 2010 the total imports exceed the total foreign exchange reserves by 2.4 times. Foreign exchange reserves for the first 6 months of 2011 realized a cumulative growth, but also the semi-annual import notes growth also, although not very large. This means that this indicator in the last period does not significantly change its position in relation assessment of the country risk for Macedonia. The import of vital products can often exceed the foreign currency reserves, especially in less developed countries, as a condition implies the need for postponement of payments and higher country risk that is confirmed by the previously calculated indicator.

Investment Ratio

$$InvR = \frac{\text{investment in fixed assets}}{GDP} = \frac{81.872}{410.734} = 19.9 \approx 20\%$$
(3)

(According to the State Statistical Office of Republic of Macedonia¹ investments in fixed assets in 2009 are amounted to 81.872 million denars, and the gross domestic product 410.734 million. Thus, the rate of investment for that year is 20%)

The rate of investment determines the ratio of productive investments in relation to GDP, as opposed to consumption. Higher rate of investment implies more productive economy in future, and thus less risk of delay in payment of the debt burden. This implies a *negative* relationship between InvR and country risk. Opposite view of this is that the high rate of investment may impose an atmosphere of borrowing of the country before domestic and foreign financial institutions in order to continue the trend of investment, which raises the threat of untimely debt payments. This view is an argument for a *positive* correlation between investment rates and the probability of reprogramming of debts, especially if the less developed countries (LDC) significantly invest in industries that are import competing.^j

VAREX- Variance of Export Revenue

 $VAREX = \sigma_{ER}^2$

(4)

¹ State Statistical Office of Republic of Macedonia. (2011). Statistical Yearbook of Macedonia 2011, Skopje, (pp. 346)

^j Acharya S. and Diwan I. (1993). Debt Conversion Schemes of Debtor Countries as a Signal of Creditworthiness: Theory and Evidence, International Economic Review 34, (pp. 795-815)

Income from exports by less developed countries can vary significantly due to two risk factors: Quantitative risk - which means that production and export of products with a low degree of processing periodically may be in a stage of surfeit or deficit. Price risk-world prices at which the underdeveloped countries can sell their products on the world market (e.g. copper, gold, etc.) are very variable under influence of the change of the worldwide supply and demand. The variability of revenue from export is positively correlated with the probability for delay of payments.

Domestic Money Supply Growth

$$MG = \frac{\Delta M}{M} = \frac{1.684}{50.257} = 0,0335 = 3,35\%$$
(5)

In the previous form are used the change of the primary money in July compared to June 2011 (1.684 million denars) and the level of the primary money in July 2011 (50.257 million denars).^k In this, according to the methodology of National Bank of RM the primary money include currency in circulation (including vault cash in the banks treasury), obligatory reserve of the denars and foreign currency deposits and excess liquid resources over the reserve requirement.

The rapid growth of money supply in the country (ΔM) in relation to the initial level (M) indicates the occurrence of inflation and depreciation of the domestic currency. Inflation refers to a positive correlation between money supply growth and the probability of delay of payments. Inflation in Macedonia in 2011 is projected at about 3%, which corresponds with the previously calculated indicator and don't points to its serious growth.

Once you consider the following key variables follows their summing, and the calculated probability of postponing repayment of liabilities (p). Generally it would look like this:

$$p = f(DSR, IR, InvR, VAREX, MG...)$$
(6)

+ + + or - + +

Following is a calculation of the relative importance of certain key variables and application of a statistical methodology for data processing. As a result we get a summary indicator of risk exposure of a national economy. For more accurate decision-making, it is desirable to compare this indicator with the indicators of risk exposure, i.e. the country risk ranking according to several agencies that perform ranking by different methodology. After that managers of financial institutions or other businesses, make decisions to invest or not invest in a particular country. The calculation of the probability of postponing the repayment of liabilities (p) and receiving the summary indicator requires a complex methodology that goes beyond the scope of this paper.

In any case, these indexes are crucial for the country's image and interests of investors. Prior to even look at or listen to the government programs to attract foreign investment, evaluation of macroeconomic

^k National Bank of Macedonia, Research Department. (2011). *Monthly Information 07/2011*, Skopje, (pp. 31-32)

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policy and so on, the international investors first see this index. It is for them, first and primary criterion for whether it is worth developing the idea of investing in any country.

4. Main macroeconomic indicators – meter tendency of country risk and suggestions for its reduction

Here is an overview of the basic macroeconomic indicators in Republic of Macedonia that are included in the calculation of the risk indicators for the country and through which tendency of movement can be followed and predicted the changes in risk exposure of Macedonia. The review covers the basic macroeconomic indicators for the period 2007-2014 year, where the data for the period 2011-2014 year are projections of the Ministry of Finance of the Republic of Macedonia.

From the analysis it is obvious that although the economic structure has improved to some extend in recent years, it is still weak and less developed. Average annual real growth of GDP per capita was just 2,2% in 2000-2010. In 2009 it observes a rate of decline of 0,9% (at a time of the global economic crisis), and in 2010 growth rate of mere 0,7%. The prognosis of the Ministry of Finance is that in the next four years this indicator will grow at an average annual rate of 4,8%, which is very optimistic prognosis (table 1).

Selected macro economic indicators	2007	2008	2009	2010	2011	2012	2013	2014
GDP (euro mill)	5.965	6.720	6.677	6.890	7.345	7.906	8.591	9.353
GDP per capita (euro)	2.919	3.283	3.253	3.350	3.565	3.831	4.156	4.517
Real GDP grow th (% yr/yr)	6,1	5,0	-0,9	0,7	3,5	4,5	5,5	6,0
Inflation (CPI), (average)	2,3	8,3	-0,8	1,6	3,0	3,0	3,0	2,7
Fiscal balance (% of GDP)	0,6	-0,9	-2,7	-2,5	-2,5	-2,2	-1,9	/
Current account balance (% of GDP)	-7,1	-12,8	-6,7	-2,8	-5,3	-5,8	-6,2	-6,7
Public debt/GDP (%)	24,0	20,6	23,9	24,8	26,0	26,1	25,5	/
External debt/Exports of goods & services (%)	92,64	97,74	148,88	129,05	115,41	/	/	/
Debt-service ratio (%)	16,1	9,1	14,8	14,5	12,5	/	/	/
Foreign exchange reserves (EUR mill)	1.524,4	1.494,9	1.597,5	1.714,5	1.832,4	/	/	/
Foreign direct investments (% of GDP)	8,5	6,0	2,2	3,2	5,0	6,0	6,0	5,8
Unemployment rate	34,9	33,8	32,2	32,0	30,8	29,6	28,0	26,2
Exchange rate assumption, MKD:USD (average)	44,72	41,86	44,08	46,46	46,46	46,46	46,46	46,46
Exchange rate assumption, MKD:EUR (average)	61,18	61,26	61,27	61,51	61,51	61,51	61,51	61,51

Table 1. Macroeconomic indicators in Macedonia 2007-2014

Sources: World Bank, IMF, NBRM, Ministry of Finance, State Statistical Office of Republic of Macedonia

(The data in the brushed area represent projections of the Ministry of Finance of the Republic of Macedonia)

Monetary policy has been reasonably solid in recent years. The Macedonian denar (MKD) is de facto pegged to the euro at a rate of around 61,50 MKD/EUR, which has kept inflation in check for many years. The real effective exchange rate has been relatively stable since 2000. Annual inflation accelerated to 1,6% at the end of 2010 and the expectations are that the inflation will accelerate to 3% in the current year and in the few next years. Potentially further rising food and energy prices pose an upside risk to this

forecast. Fiscal policy has been prudent since 2003 and the fiscal deficit remained moderate at 2,7% of GDP in recession year 2009. Expectations are mild reduction of fiscal deficit, which began in 2010 to continue and slowly to intensify that trend.



Fig 1. Selected macroeconomic indicators (2007-2014), data and predictions

The external position continues to be a cause for concern. Annual trade deficits have been very high at 20-25% of GDP for many years. With the services account being roughly balanced and the income account small, much of the trade deficits have been balanced by net current transfers. Still, annual current account deficits were relatively high in 2007 and 2008 from 7,1% and 12,8% of GDP in those years respectively, and decrease in 2009 (6,7) and 2010 (2,8) deficit. Expectations are that this indicator in the period 2011-2014 will range between 5% and 7%. Public debt is about ¼ of the GDP and remains in that frame in the forecasts to 2014. The external debt position is precarious. Gross external debt has increased from 92,64% of exports in 2007 to 148,88% in 2009. In 2010 is 129,05% of exports with a tendency to decrease in further years, but still over 100% of total exports. The external debt-service ratio of some 14,5% in 2010 and forecast at 12,5% in 2011 appears manageable, though is has risen from just 9,1% in 2008. Foreign exchange (FX) reserves rose from 1.524,4 to 1.714,5 million EUR, this is still sufficient to finance four months of imports but it covers only about 85% of short-term external debt and principal repayments due in 2011.



Fig 2. GDP and Foreign Exchange Reserves (EUR millions) (2007-2014), data and predictions

The government has made an effort to improve Macedonia's attractiveness for foreign investment over the past years. However, in practice many difficulties continue to hamper doing business. In this context, foreign direct investment amounted to only about 3,2% of GDP in anticipation of their increasing to about 6% of GDP in the next few years. The very high unemployment rate of over 30% masks a substantial level of black market activities.

In terms of guidelines for reducing the risk exposure of Macedonia should first pay attention to the fundamental weaknesses in the components that are used to monitor and measure country risk. Basic areas of weakness include intervention in the economy, effective implementation of reform measures, the overstaffed bureaucracy, significant corruption and weak protection of property rights. EU, IMF and World Bank continue to urge Macedonia to accelerate its structural reform process. Despite the strengths related to the solid monetary policy, exchange rate stability and prudent fiscal policy, weaknesses should be found in the slow reform processes, unfavorable economic structure, bank-centric of the financial system and insufficient development of non-banking financial institutions, the continuing trade deficit, external debt, insufficient foreign currency reserves to settle its due debts and high unemployment rate. Measures that would help overcome or at least reduce the above mentioned weaknesses would be aimed at changing the perception of Macedonia on the international business arena that of reducing Macedonia's country risk.

5. Conclusion

The credit rating of the country is assessment of the future economic and political stability. It is determined by great number of internal and external factors, so its systematization in the summary assessment requires a complex methodology procedure. One national economy could wholly or partly intervene about the internal factors that determine this category, but remains over galaxy of external factors to which can not affect. They must be accepted as objective reality and to develop strategies to overcome the situations, especially in conditions of unstable environment and severe expresses turbulences as in this period. Basically, in the nature of country risk (sovereign risk when these terms are used as synonyms) there are two forms of non-responding to the debt obligations to foreign investors: debt repudiation and debt rescheduling.¹

In any case, the country risk assessed and calculated based on several relevant criteria and by reputable international institutions must be taken into account in international investments. If still had some of the adverse circumstances, strategies are necessary for dealing with this kind of risk. In most cases can be used a combination of instruments in direction of: reprogramming the payment of the principal and interest, additional financial assistance from the International Monetary Fund (IMF) and other international agencies, stimulating export and reduce import by indebted countries in order to strength their economies to the level of capability for repayment of debt and so on. Specifically the reduction of risk exposure for Macedonia can be achieved by overcoming the fundamental weaknesses in the implementation of reform processes, i.e. by reducing of unemployment, improving the economic

¹Saunders A., Cornett M. M. (2006). *Financial Institutions Management – A Risk Management Approach*, McGraw – Hill International Edition, (5th ed.), (pp. 441)

structure, acceleration of the development of non banking financial institutions, reducing the trade deficit and external debt and increasing the foreign exchange reserves.

At the end of August 2011 (24/08/2011) "Standard & Poor's," reported that reduces long-term sovereign credit rating of the Republic of Macedonia, which refers to the country's ability to return loans in local currency (denar) to the level of "BB" vs. the previous higher level "BB +". The agency also confirmed the sovereign credit rating of Macedonia, which refers to the country's ability to return loans taken in foreign currency at the same level "BB". S&P also confirmed the short-term credit rating of Macedonia on level "B". The outlook is stable, meaning that the country is not put on a list for further reduction of credit ratings in the next 12 months. The rating for country's ability to transfer and convertibility is also verified and it remains on the level of "BB +"). According to the Ministry of Finance of the Republic of Macedonia due to the application of new methodology introduced by the agency on June 30 this year, and which change the approach of assessing the state and in which the difference between local and foreign currency will tend to decrease.

Having in mind the environment and its instability, it is evident reduction of credit ratings of many countries in the near and distant environment. Nowadays we are witnessing a reduction in credit rating of Italy. Agency "Standard & Poor's" cut Italy's credit rating from "A+/A-1+" to "A/A-1" due, as suggested by the rating agency, the negative outlook of the country. This is the latest in a series of measures to deepen the debt crisis in the Euro zone, to which Macedonia is striving for. The situation with the credit rating of Greece has been alarming a long time. In late July 2011 rating agency "Moody" reduce assessment for the Greece long-time debt on "Ca", versus previous "Caa1". At the same time Bulgaria jumped on the list for one degree level to "Baa2" and according to S&P to "BBB" with a stable forecast for the next 12 months. Serbia's ratings is "BB" "stable", meaning that no change is expected in the ratings for next year or two, the same rating "BB" has Montenegro, and Bosnia has a lower "B +" rating. Better credit rating of Macedonia has Croatia "BBB-" and Slovenia "AA".

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