# SOVEREIGN RISK ASSESSMENT UNDER ECONOMIC CRISIS CONDITIONS

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**ABSTRACT:** *Due to the amplification of globalization phenomenon, the risks to which international activities are exposed have become much more diversified and complex. A special status among international risks is the country risk. A foreign investor will never invest in some country without performing and analysing an evaluation report of that country. So, we can conclude that these reports are like a visiting card of assessed countries. Therefore, within this context of global economy evolution it is imperative to know the sovereign risk of every state.*

**KEY WORDS:** *sovereign risk; economic crisis; economic factors; political factors; development; globalization.*

**JEL CLASSIFICATION:** *G01; G24.*

Due to the amplification of globalization phenomenon, the risks to which international activities are exposed have become much more diversified and complex. A special status among international risks is the country risk. In a wider meaning, the country risk express the probability of financial losses in international affairs, losses generated by macroeconomic, social and political events in the assessed country (Costică & Lăzărescu, 2004)

The aim of risk evaluation is pointing out the difficulties that can emerge in respect of paying by analysed country the obligations that come from external debt and also from other obligations. The result of country risk evaluation is the main indicator that decides if that country is favourable to business implementation.

As a rule, a foreign investor will never invest in some country without performing and analysing an evaluation report of that country. So, these reports are like

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a visiting card of assessed countries. Therefore, within this context of global economy evolution it is imperative to know the sovereign risk of every state.

IMF has warned that the risks upon global economy have risen. The situation is due to crisis continuation in Greece, difficult negotiations upon American deficit and the need to attenuate the explosive growth of Asia. However, IMF estimates a constant growth of global economy of 4.3% in 2011 and 4.5% in 2012.

Rating agencies - Standard & Poor's, Moody's and Fitch analyses the degree of risk and gives to countries and companies a mark that reflects the capacity to pay their debts. Triple A was the maximum rating given by S&P, and United States had this rating permanently since 1941.

S&P agency announced that the economic measures taken by the American officials are short of satisfactory and downgraded US rating. It's for the first time in history when US rating falls from the highest level AAA, from 1917, now being AA+. S&P also added a negative perspective, which means that in the next two years the rating can go down again.

In Europe, Italy joins Spain, Ireland, Portugal, Cyprus and Greece on the list of countries in Euro zone that received a low rating from international agencies.

In Europe the country with the lowest rating is Greece, who was downgraded by S&P and Moody's because the risk of default was 50-50. Ecuador halted payments twice, in 1999 and 2008 and Argentina had its default in 2001.

According to Standard&Poor's, the countries with the lowest rating in the world are listed below.

**Table 1. Countries with the lowest rating in the world**

| Countries | Rating |
|---|---|
| 1. Greece | CCC |
| 2. Jamaica | (B-) |
| 3. Ecuador | (B-) |
| 4. Pakistan | (B-) |
| 5. Grenada | (B-) |
| 6. Fiji | (B-) |
| 7. Belarus | (B) |
| 8. Argentina | (B) |
| 9. Belize | (B) |
| 10. Ghana | (B) |

*Source: Standard&Poor's Agency*

In this context we realised a risk comparison between Romania and another European state, respectively Bulgaria, using a Romanian method, respectively EximBank method.

In Romania, EximBank is involved since 1992 in promotion of Romanian business environment, supporting with its financial tools the proposed and deployed projects by local companies. Besides the feature of commercial bank of EximBank a new characteristic of Export Credit Agency is added and is intended for supporting Romanian exporters. Therefore, the tops elaborated by Import Export Bank of Romania take account of country risk associated to commercial activities and are customized for the situation of Romanian exporter.

BEIR (EximBank) assesses country risk on short term based on two classes of factors: economical and political factors. The weight of these categories of factors in final score is identical and is 50%.

EximBank method is a combination of quantity and quality analyses similar rather to techniques used by specialized international firms than banking institutions. And it's natural, because the aim of the analysis is rather to give information to the clients concerning country risk than optimizing banking portfolio. So, besides given tops, BEIR offers extra products, their function being to help Romanian exporters to take correct decisions.

Here are taken account of:

- country files that contain various information concerning political, economical and financial situation of the state;
- twice a year there is edited a Country Risk Assessment that is a synthesis of political and economical information of assessed countries;
- regional analyses;
- studies on specific subject realised at the demand of its clients.

**Quantification and country risk evaluation for Romania using analytic model of EximBank for 2010 year.**

In the following, we will realize a country risk assessment for Romania for 2010.

I. The score of economic factors is given by the formula:

$$SE = \sum_{i=1}^{9} PFEi = 42 po\,\mathrm{int}\,s$$

1. The development level of the country calculated with the ratio GDP/capita = 7542 UDS so $PFE_1$=8 points.

2. The annual GDP growth was 1.3% in 2010 therefore $PFE_2$=0 points.

3. The position of balance of payments is given by the ratio between balance of payments and the GDP, so:

$$\frac{SBP}{PIB}\times 100 = \frac{-5{,}864(bilEUR)}{122(bilEUR)}\times 100 = -4{,}8\%$$ ==> $PFE_3$ = 4 points

4. Inflation rate was 7.96% so $PFE_4$= 4 points.

5. Export dependency is calculated as a ratio between collections from the main exported product and total value of exports (12%). In this case PFE5 = 9 points

6. The level of import coverage by exports, $G_{co}$, is calculated as a ratio between goods and services export and goods and services import:

$$Gco = \frac{Exports}{imports} \times 100 = \frac{37{,}251(bilEUR)}{43{,}115(bilEUR)} \times 100 = 86{,}4\% \implies PFE_6 = 2 \text{ points}$$

7. The situation of reserves in months of imports is calculated as a ratio between currency reserves and imports of every month of the year. This is according to NBR 8.6 months resulting $PFE_7 = 12$ points.

8. The value of the ratio between short term debt and total external debt is:

$$\frac{STD}{TD} \times 100 = \frac{18{,}746(bilEUR)}{90{,}765(bilEUR)} \times 100 = 20{,}7\% \implies PFE_8 = 3 \text{ points}$$

9. The situation of external payments is given by the rate of external debt service:

$$Spex = RSDex = \frac{SDex}{Ex} \times 100 = \frac{37{,}822(bilEUR)}{43{,}604(bilEUR)} \times 100 = 86{,}74\% \implies PFE_9 = 0 \text{ points}$$

II. The score of political factors is given by the relation:

$$SP = \sum_{j=1}^{6} PFPj = 50 po\text{int}$$

1. Actual state of government: ==> PFP1 = 5 points

The actual government is one of the most unpopular and untrusted governments since 1990, due to drastic economic measures, being sustained by a fragile majority formed with undemocratic methods, by headhunting members of parliament of other parties, and setting up a new political formation which even though did not participate at the election, participates to governmental act.

2. Economical policy of the government ==> PFP2 = 1 point.

Economical policy of the government is practically non-existent, it foundations being inefficient cuts of expenses and tax growth. Despite huge loans Romania accessed, important investments for economic recovery are still insufficient.

3. Internal tensions: ==> PFP3 = 9 points

Social tension: even if there are tensions among the population, massive protest don't really exist. ==> 1 point;

Ethnic, racial, cultural and religious tension: 2 points;

Political tension: 0 points.

4. International position ==> PFP4 = 5 points

International position of Romania was characterised by a worsening relation with other states, especially France, Romania being in a diplomatic isolation.

5. Debt restructuring ==> PFP5 = 15 points

6. Experience of bilateral relations==> PFP6 = 15 points

**Finally applying the formula for the total score:**

$$SF = \frac{SE \times SP}{100} = \frac{42 \times 50}{100} = 21 po \operatorname{int} s$$

**Quantification and country risk evaluation for Bulgaria using analytic model of EximBank for 2010.**

In the following, we to realize a country risk assessment for Bulgaria.

I. The score of economic factors is given by the formula:

$$SE = \sum_{i=1}^{9} PFEi = 52 po \operatorname{int} s$$

1. The development level of the country calculated with the ratio GDP/capita = 6334 UDS so $PFE_1$=8 points.

2. The annual GDP growth was 1.3% in 2010 therefore $PFE_2$=0 points.

3. The position of balance of payments is given by the ratio between balance of payments and the GDP, so:

$$\frac{SBP}{PIB} \times 100 = \frac{-0{,}356(bilEUR)}{36(bilEUR)} \times 100 \approx -0{,}01\%$$ ==> $PFE_3$ = 8 points

4. Inflation rate was 4.5% so $PFE_4$= 5 points.

5. Export dependency is calculated as a ratio between collections from the main exported product and total value of exports (12%). In this case PFE5 = 9 points

6. The level of import coverage by exports, $G_{co}$, is calculated as a ratio between goods and services export and goods and services import:

$$Gco = \frac{Exports}{imports} \times 100 = \frac{15{,}588(bilEUR)}{18(bilEUR)} \times 100 = 86{,}6\%$$ => $PFE_6$ = 2 point

7. The situation of reserves in months of imports is calculated as a ratio between currency reserves and imports of every month of the year. This is according to NBR 4.9 months resulting $PFE_7$ = 9 points.

8. The value of the ratio between short term debt and total external debt is:

$$\frac{STD}{TD} \times 100 = \frac{11{,}505(bilEUR)}{36{,}68(bilEUR)} \times 100 \approx 31{,}3\%$$ ==> $PFE_8$ = 0 point

9. The situation of external payments is given by the rate of external debt service:

$$Spex = RSDex = \frac{SDex}{Ex} \times 100 = \frac{7{,}082(bilEUR)}{15{,}588(bilEUR)} \times 100 \approx 45{,}4\%$$ ==>$PFE_9$ = 7 points

II. The score of political factors is given by the relation:

$$SP = \sum_{j=1}^{6} PFPj = 64\, points$$

1. Actual state of government: ==> PFP1 = 5 points

The centre-right party that win the elections in July 2009 continued to govern by itself without a parliamentary majority, based on the help of another centre-right party and other right formations. Despite significant efforts of the authorities, decisive improvements are still to be seen in reformation of law system, the fight against corruption and community funds management.

2. Economical policy of the government ==> PFP2 = 7 point.

Economical policy of the government has a reasonable coherence, the set of anti-crisis measures established after negotiations with social environment having positive results.

3. Internal tensions: ==> PFP3 = 12 points

There were given 2 point for each category.

4. International position ==> PFP4 = 10 points

Generally, the international relations of Bulgaria are good.

5. Debt restructuring ==> PFP5 = 15 points

6. Experience of bilateral relations==> PFP6 = 15 points

**Finally applying the formula for the total score:**

$$SF = \frac{SE \times SP}{100} = \frac{52 \times 64}{100} \approx 33\, points$$

In table 2 are presented the scores of economic and political factors for Romania and Bulgaria calculated with EximBank method.

With a final score of 21 points, Romania would be situated in 2010 in risk class C (18-26 points). This corresponds to a situation where foreseeable major payment difficulties are, and in case this would happen, there would be big losses with severe influences upon economy and social-political environment.

With 33 points, Bulgaria would have been situated in risk class BC (26-35 points) in 2010. This corresponds to a situation where foreseeable moderate payment difficulties are, and in case this would happen, there would be significant losses.

Comparing these three states by GDP per capita at nominal values, according to studies made by IMF in 2010 for the entire world, these states would be in this order: Romania – position 70 (with 7542 $/inhabitant) and Bulgaria on 74th place (with 6334$/inhabitant).

At the first inspection it seemed that Romania has an advantage over Bulgaria. But this indicator does not take into consideration the level of the prices in these countries. So a thorough comparison is the one based on GDP per capita as purchasing power parity because this take account of prices in these countries. According to this comparison the standings would be like this:, Bulgaria on 65th place (12851 Intl. $) and Romania on 69th place (11860 Intl. $). While Romania kept their position, Bulgaria's position in this case is improved overtaking Romania.

**Table 2. Quantification and risk evaluation for Romania and Bulgaria**

| Indicators | Romania | Bulgaria |
|---|---|---|
| **The score for economic factors** | **42** points | **52** points |
| The level of development of the country | 8 points | 8 points |
| Annual GDP growth | 0 points | 2 points |
| Balance of payments situation | 4 points | 8 points |
| Inflation rate | 4 points | 5 points |
| Export dependency | 9 points | 9 points |
| Coverage degree of imports by exports | 2 points | 2 points |
| Import reserve situation in months | 12 points | 9 points |
| Proportion between short term debt and total external debt | 3 points | 0 points |
| External payments situation | 0 points | 7 points |
| **Political factors score** | **50** points | **64** points |
| Actual state of government | 5 points | 5 points |
| Government economic policy | 1 points | 7 points |
| Internal tenseness | 9 points | 12 points |
| International position | 5 points | 10 points |
| Debt restructuration | 15 points | 15 points |
| Bilateral relations experience | 15 points | 15 points |
| **Final score** | **21** points | **33** points |

Out of the three countries, Romania is the only one that recorded a negative economic growth of -1.3%, Bulgaria recording a real growth of 0.2%. Also in this position of balance of payments, Romania is the last out of the two countries, the balance of payments representing -4.8% of GDP, followed by Bulgaria with approximately -0.01%, of GDP. Romania and Bulgaria records a degree of import coverage by exports very similar, of 86.4% for Romania and 86.6% for Bulgaria, both have a low export dependency. According to inflation rate, over the year 2010 Romania recorded an inflation rate of 7.96% and by Bulgaria with 4.5%.

With regard to external debt for Romania and Bulgaria, the biggest external debt is the one of Romania, being situated at approximately 90 billion euro, while Bulgaria's external debt is 37 billion euro, which means a more than half debt than Romania. Within the external debt, in 2010, the short term debt for Romania had a weight of 20.7%, and 31.3% for Bulgaria. However, in 2010, the service of debt was approximately 38 billion euro in Romania's case and 7 billion euro for Bulgaria, which related to exports along the year, represents 86.74% respectively 45.4%.

Taking into account all these economic indicators that are used within quantification of country risk, result that Bulgaria, a country that a few year ago was under Romania in most of the economical statistics, managed to draw ahead of Romania, due to the measures taken by Bulgarian government but also because of some uninspired measures taken by Romanian government, measures that resulted in relocation of many companies from Romania to Bulgaria.

Fitch agency upgraded the rating of Romania for long term foreign currency credits with one level from BB+ to BBB-, bringing us back in the category of recommended for investments countries. For long term credits in lei, the ranking upgraded from BBB- to BBB, while debt ceiling improved from BBB to BBB+. The short term credit rating was revised to upgrade from B to F3. Fitch decreased country rating in 2008 together with Standard & Poor's, reaching even to junk – not recommended for investments, during the recession.

The result of the study realised with EximBank method of rating country risk for Romania and Bulgaria is coordinated with rating given by Standard&Poor's Agency for the two states, which has rated Bulgaria better. Analysing the Sovereign Rating List made by Standard&Poor's Agency for Romania and Bulgaria, we notice that Local Currency Rate, Foreign Currency Rate, T &C Assessment Bulgaria has higher rates compared to Romania. This fact, especially in the context of global crisis, leads to a reduction of foreign investments in Romania. At the end of 2010, the foreign investments in Romania had a value of 52,585 billion euro.

**Table 3. Sovereign Rating List for Romania and Bulgaria**

| Sovereign Rating List | Romania | Bulgaria |
|---|---|---|
| Local Currency Rate | BB+ | BBB |
| Foreign Currency Rate | BB+ | BBB |
| T &C Assessment | BBB+ | A |

*Source: Standard&Poor's Agency*

This fact, especially in the context of global crisis, leads to a reduction of foreign investments in Romania. At the end of 2010, the foreign investments in Romania had a value of 52,585 billion euro. Taking into account these aspects, can be predicted that out of these two countries in Eastern Europe, Bulgaria will have a better evolution, which is not at all ecstatic for Romania.

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