State Debt of the Republic of Moldova as Essential Factor of the Country Risk

Rodica HÎNCU
hincu@ase.md
Ana SUHOVICI
annasukhovich@mail.ru
Mariana BUNU
marianabunu@yahoo.com
Ana GUMOVSCHI
anagumovschi@yahoo.com
Daniela DASCALIUC
danieladascaliuc@mail.ru
Marcelina ROSCA
marcelina.rosca@mail.ru
Department of Finances, Academy of Economic Studies of Moldova

Abstract
This paper discusses issues concerning of the state debt risk related to the Republic of Moldova and the determinants of the state debt in the context of the country risk. Special attention is devoted to analyzing the dynamics and structure of Moldova's foreign debt by currency and sector, in terms of the components parts of the foreign debt risk of Moldova - refinancing risk, currency risk and interest rate risk. It is analyzed the external state debt, publicly guaranteed, and non-guaranteed private external debt.

Keywords: State debt, refinancing risk, currency risk, interest rate risk, credit risk, liquidity risk, operational risk.

1. Introduction
In conditions of the economic crisis and following the recovery of the national economy's growth trajectory an important role play the management of the state debt risk. This is because the state debt is an essential factor of the country risk, of the possibilities and conditions to attract investment at government and private level. In this context risk is in the focus of authorities managing the economic and financial field, facts that are reflected in the Strategy for management of the state debt of the Republic of Moldova for medium term (2011-2013), in which is stating the importance of the state debt management for "attracting funds to finance priority sectors of national economy... at optimal level of risk" [4].

To achieve that objective, an important role it is "to reduce financial risks (currency risk, interest rate risk, refinancing risk, credit risk and strictly monitoring of the volume of state debt, etc.)" [4]. The risk represented, throughout history, in general, and economic theory, in particular, one of the most fascinating subjects of investigation and research. Currently the specificity of the degree of exploration of the subject of the research of risks related to Moldova's national economy is, on the one hand, the lack of one methodology to identify the determinants of the risks associated to national economy and their impact on investment decisions and, on the other part - the absence of a systemic approach of the risks specific to the Moldovan economy and possibilities to diminish them.
2. The components of the country risk

Through different classification criteria, respectively, types of risks specific to investment activities related to national economy and in the context of external state debt risks study, the authors consider appropriate the research of the country risk.

Country risk, in turn, is a consequence of political instability, indebtedness being mostly reliant on government policy coherence and quality of macroeconomic management. Country risk can be analyzed in terms of three basic coordinates:

- economic risk;
- political risk;
- social risk.

These components are in an inevitable and permanent interdependence, since the economic and social policy consists a part of the General State Policy. This interdependence requires joint treatment of those components since they characterize as a whole, the same phenomenon: the country risk.

Country risk includes all risks specific to the functioning of economic and social activities in a sovereign and independent national framework, where are applied own policies, decisions and strategies. The specialized literature states that this category includes the following elements:

- the amount of external debt and its service ratio;
- the government policy regarding the liberalization or restrictions of business environment;
- the flow and structure of foreign trade;
- the current account deficit and external payment rate compared with foreign currency reserves, the price control policy and resource allocation;
- the rate and structure of the budget deficit compared to GDP and inflation, respectively, the size and structure of expenditures made by means of national and international debt and their profitability etc.

3. Analysis of the risks related to state debt of the Republic of Moldova

State debt of the Republic of Moldova is represented by current and outstanding pecuniary contractual obligations of the state as well as of interest due and unpaid, arising from the quality of the State as borrower or guarantor, being contracted by the Government through the Ministry of Finance, in national or foreign currency. Quality management of state debt plays an important role in reducing the vulnerability of developing countries to financial crises, including the Republic of Moldova. This also persuade the possibilities and conditions for attracting investment in national economy. Thus, quality management of the state debt directly contributes to attracting investment throughout the analysis of the risks related to the portfolio of the state debt and its efficient coordination with the macroeconomic situation.

In general, a high amount of the state debt and high costs, for serving it, may become a cause of poverty and unemployment, whereas paying external obligations consumes financial resources which otherwise would be directed in areas such as health, education, welfare of the population etc. In this context, state debt management becomes very important because state debt management is conducted under conditions of uncertainty regarding the future levels of determinants with impact on decisions. And this is inevitably associated with country risk management.

Risk management, in general, is a process linked to investment activity and directly focused on several dimensions, such as:

a) the macroeconomic framework (economic growth in Moldova and in the rest of the world, inflation, global economic crises);

b) the budget and tax framework (amount of funding requirements, including for covering the budget deficits);

c) the economic conditions on the market (level of interest rates on national and international market, exchange rate, demand for government securities);

d) the institutional and legal framework (changes in legislation) etc.
All these dimensions need to be taken into consideration in the process of analysis of the risks related to state debt management. Based on research of the specialized literature and analysis carried out in the field, noted that the risk related to state debt can be analyzed in two directions:

I. **Risk of negative impact of the state debt on the national economy:**

This risk increases with the increase of the state debt balance and an inappropriate debt structure will contribute additional to increase of the risk. Thus, among the negative effects that may affect the economy of the Republic of Moldova are listed:

- uncontrolled growth of the balance of state debt, including as a share of GDP, which could lead to total or partial loss of the paying capacity of the Republic of Moldova;
- the perception of Moldova as a country with an increased risk, and this would have a negative impact on interest rates and exchange rates.

II. **Risk related to changes in the balance of state debt and its servicing costs.**

At a stable level of funding needs, the level of state debt, servicing costs and the risk of deviation from expected values resulting from the adopted financing structure (types of used debt instruments, their characteristics etc.). The main types of risks associated to state debt specified in the Strategy for the state debt management of the Republic of Moldova on medium term (2011-2013) are:

- refinancing risk;
- currency risk;
- interest rate risk.

Besides those mentioned above, can be analysed and other categories of risks, which acts indirectly on the state debt:

- the risk of the liquidity of the state budget;
- other types of risk, particularly credit risk and operational risk.

Returning to the main indicators of risk associated to the state debt, mention that the three categories include:

- **Indicators that express the foreign currency risk:**
  - external state debt in relation with the internal one;
  - debt portfolio structure by currencies and currency exposure;
  - ratio between state’s liabilities in foreign currency and foreign currency reserves.

- **Indicators that express refinancing risk:**
  - the average maturity of state debt portfolio;
  - debt due within one year;
  - redemption chart - is part of the debt falls due within a certain period of time.

- **Indicators that express the interest rate risk:**
  - fixed-rate debt related to floating-rate debt;
  - debt to be refixed in a year,
  - the average period to be refixed - indicates the time until the interest rate resets.

- **Liquidity risk** - the average volume of liquid financial assets.
- **Operational risk** - defined procedures.

Given that, at the situation in December 31, 2009 about 65% of state debt it is external state debt, consider one of the significant risks is the risk management of state debt is the **currency risk**. On exchange rate fluctuation depends not only the balance of state debt, but also the economic situation in the country. An unforecasted evolution of the exchange rate could worsen the value of the GDP and of inflows to the state budget.
In the structure of state debt by currency, it is noted that the highest share of it, is expressed in national currency (figure 1). Also, a significant currency exposure occurs to SDR currency basket (where the prevailing U.S. dollar) and to the U.S. dollar. The share of other currencies is less than 10 percent, which indicates a low risk.

A special concern in the context of country risk management in the Republic of Moldova is the status and dynamics of the external debt, which can be observed from the data presented in Table 1.

### Table 1. Gross external debt of the Republic of Moldova during 2005-2009 (million USD)

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Sector</td>
<td>657,60</td>
<td>718,23</td>
<td>765,80</td>
<td>778,30</td>
<td>957,54</td>
<td>990,01</td>
</tr>
<tr>
<td>Monetary authorities</td>
<td>95,44</td>
<td>149,96</td>
<td>159,36</td>
<td>166,97</td>
<td>153,33</td>
<td>178,76</td>
</tr>
<tr>
<td>Other sectors</td>
<td>980,30</td>
<td>1180,88</td>
<td>1523,36</td>
<td>1853,01</td>
<td>1994,48</td>
<td>1985,70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2078,05</strong></td>
<td><strong>2528,93</strong></td>
<td><strong>3355,92</strong></td>
<td><strong>4106,08</strong></td>
<td><strong>4368,83</strong></td>
<td><strong>4391,79</strong></td>
</tr>
</tbody>
</table>

Source: adapted by the authors based on NBM’s annual reports [9].

According to the data presented in the table 1 is observed that at the 31.12.2009, compared to the 31.12.2005, foreign debt, denominated in dollars has doubled, in absolute terms, and the situation at the 31.03.2010 shows a future greater growth of external debt. A particular interest also concerns the analysis of external state debt, publicly guaranteed and private non-guaranteed debt which is presented in Table 2.

### Table 2. External public debt, publicly guaranteed and non-guaranteed private debt (million. USD)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Public debt and publicly guaranteed debt</td>
<td>943.99</td>
<td>957.36</td>
<td>1139.75</td>
</tr>
<tr>
<td>Private non-guaranteed debt</td>
<td>2411.93</td>
<td>3148.72</td>
<td>3229.08</td>
</tr>
<tr>
<td>Direct Investment: intra-group lending</td>
<td>545.03</td>
<td>729.81</td>
<td>781.51</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3355,92</strong></td>
<td><strong>4106,08</strong></td>
<td><strong>4368,83</strong></td>
</tr>
</tbody>
</table>

Source: adapted by the authors in the source [9].

The data presented in the table, further confirms the general trends of increasing external state debt. It should be mentioned that along with increased external debt, an important factor for the financial stability of the Moldovan economy is the currency structure of that debt and the situation on the global and national foreign exchange market. Proceeding from the above analysis, it seems appropriate to analyze the position of the Republic of Moldova and other countries in the rating of Failed States in 2010, presented in Table 3.
According to the rating shown in the Table 3, United States of America (which currency is the essential share of external state debt of the Republic of Moldova, and which currency constitutes the bulk of the SDR basket) are the last place in the list of analysed states. The high level of external debt of U.S. is causing instability and currency disruptions on the global, regional and national level. Even so, a survey by Fitch credit ratings agency state that European and US investors are worried about European government debt levels having a negative view on sovereign debt fundamentals and funding needs in 2010. A debt and budget deficit crisis in Greece, which has the highest public deficit in the eurozone, has led to a sharp loss in market confidence. The survey also found that 70 percent of European investors are concerned that sovereign credit fundamentals will deteriorate and 55 percent expect sovereign bond spreads to widen. Fitch said that European governments had increased their overall debt in 2009 by 20 percent from the level in 2008 and that on average nearly one fifth of national output would be absorbed by debt costs, but in some countries such as Italy, France and Ireland it would be about one quarter. Another leading ratings agency, Moody’s, warned that 2010 would be a "difficult" year for European government debt ratings.

In November, it had warned that global government debts had risen by nearly 45 percent from 2007 to 2010, or by 15.3 trillion dollars (10.86 trillion euros) and in 2010 would total 49.3 billion dollars. These concerns highlight an accumulation of past annual budget deficits, together forming national debts, which have risen sharply with the costs of rescuing economies during the financial crisis.

In 2009, the balance of external state debt of the Republic of Moldova has been adversely affected in particular and by the national currency’s depreciation against the U.S. dollar since at the end of 2009, the balance of state debt denominated in U.S. dollars declined by about 4.63 million U.S. dollar versus the previous year, while the balance of debt expressed in MDL increased by 1423.0 million MDL.

Another type of risk associated to the portfolio of the state debt is the interest rate risk.

<table>
<thead>
<tr>
<th>Country</th>
<th>Place in the rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moldova, Republic of</td>
<td>58</td>
</tr>
<tr>
<td>China</td>
<td>52</td>
</tr>
<tr>
<td>Russia</td>
<td>80</td>
</tr>
<tr>
<td>Ukraine</td>
<td>109</td>
</tr>
<tr>
<td>USA</td>
<td>158</td>
</tr>
</tbody>
</table>

Source: adapted by the authors in the source [10]
Analysing the structure of state debt by type of interest rate, it is found that interest rate risk differ for internal and external debt. It is noted that the share of state debt with floating rate *not exceed* 25% of the total state debt portfolio. By type of debt, however, the *external state debt* is exposure a greater extent to interest rate risk in comparison with the internal state debt. Note that state loans attracted from abroad are with floating rate, LIBOR, EURIBOR for six months. During the year LIBOR rate had a relatively positive dynamic for service, having in dynamic a fluctuation, at the beginning of the year at the quota of 1.62, reaching to minimum to 0.45 yearly, in December. The main indicators of interest rate risk and refinancing risk at the end of 2009, are presented in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Internal State Debt</th>
<th>External State Debt</th>
<th>Total State Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest rate risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floating rate debt</td>
<td>10,9%</td>
<td>28,2%</td>
<td>22,2%</td>
</tr>
<tr>
<td>Debt on interest rate to be refix within 1 year</td>
<td>100%</td>
<td>29,9%</td>
<td>35,4%</td>
</tr>
<tr>
<td>Average time to refixing (ATR), years</td>
<td>0,5</td>
<td>12,9</td>
<td>10,5</td>
</tr>
<tr>
<td><strong>Refinancing risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt maturing in 1 year</td>
<td>89,1%</td>
<td>4,8%</td>
<td>22,9%</td>
</tr>
<tr>
<td>Average time to maturity (ATM), years</td>
<td>0,6</td>
<td>13,6</td>
<td>11,3</td>
</tr>
</tbody>
</table>

*Source: Based on preliminary data from the Ministry of Finance*

Referring to *average time to refixing* (ATR) indicator for the year 2009, internal state debt portfolio was characterized by the index of 0.5 years and the internal state debt to be refixed in a year is 100%. External state debt is characterized by fairly good indicators in terms of the average period of refixing, although has a higher proportion of debt with floating rate.

In the context of *refinancing risk*, we note that it is high related to the internal state debt, because the most of the internal state debt, about 89% at the end of 2009, is on the term of up to one year. However, over the same period of 2008, the share of the short-term debt in total national debt decreased by 5 percent which is an positive issue. Annual weighted average maturity of Government Securities in circulation at December 31, 2009 was 162 days, decreased by 44 days compared to the beginning of the year. As regards the external state debt, refinancing risk is low, because since 100% of the external state debt is long term and the average period to maturity exceeds the threshold of 10 years. The state debt repayment schedule is observed that the most of the outstanding debt is concentrated in the first year, being represented mainly by the internal state debt which is mainly on short-term. However, much of the national state debt within one year is the debt to the National Bank which is re-registered each year at a fixed interest rate and low risk.

Another category of risk which may affect the portfolio of the state debt is *the operational risk* relating to transparency, coordination, separation of functions, procedures, internal and external controls, information systems, and includes many different types of risks, such as errors at different stages in the execution and registering of transactions, imperfections or failures in internal controls or systems and services, legal risks, security breaches or natural disasters that may affect the business activity.

**4. The risks that may affect the implementation of state debt management strategy**

For an efficient management of country risk, which is influenced by policies that public authorities promote, an important place should be given to the strategies that they promote. The main groups of risks that may affect the implementation of strategies are *macroeconomic risks* and *fiscal risks* that may negatively influence the global framework of financial resources.

- *The macroeconomic risks* reflect the changes in economic parameters that have served as a basis for estimating the resources of the global financial framework. In particular, they concern:
  - evolution of the oil price in the world and their impact on imports of energy resources;
uncertainties regarding natural gas prices, higher prices of the imported energy resources may cause, despite prudent fiscal and monetary policies, acceleration of the inflation rhythms;
fluctuation of exchange rate of national currency, which creates additional pressure on imports and exports and is seen as a determinant of the inflation process, inflation and exchange rate dynamics affecting double the budget, while affecting both revenues and expenditures as well;
slowing international capital flows, high unemployment and unused production capacity;
natural disasters (drought, torrential rains, hail etc.), which directly affect the agricultural output.

- **The fiscal risks** arising directly from the macroeconomic risks and the performance of the revenue collection in the national public budget is conditioned by:
  - external factors, negative signals of development of the major partners of the Republic of Moldova in 2010 may have a negative influence on the country's economy will result in slower growth of revenues compared to the national public budget forecast;
  - effectiveness of revenue collection and combating the practices of tax evasion.

We believe that in order to reduce the mentioned risks, it is necessary to promote appropriate economic policies, to ensure a favorable investment environment, the diversification of the country's economic and trade relations with external partners and a stimulating business environment for all business legal entities.

5. Conclusion
Finally, we note that risk management is an important part of state debt management, which involves the identification, assessment and insurance against various categories of risk and should be meet to relationship: \( \text{Debt management} \geq \text{Risk management}. \)

But the most pronounced risk that could create considerable pressure on the state debt portfolio, and thereby, the possibilities and conditions to attract investment, is the foreign exchange risk. As a solution to reduce this risk could help increase the share of national state debt in total state debt. However, national state debt is assigned a much higher cost comparing to external state debt, also another difficulty for this is the insufficient development of the secondary market for government securities. However, actually the state debt portfolio on medium-term in the Republic of Moldova amount within reasonable limits concerning the associated risks, fact that supposes that national economy offers confident condition for investors.

In these conditions, in order to identify and estimate risks of investment in real sector of national economy would be recommended:
1) to develop a methodology for evaluating the investment risk for the Moldovan economy by connecting international valuation methodologies relevant to the specific investment risk of the national economy;
2) to create in order to conduct regular assessments of risks related to investment activity in the real sector, a specialized national rating agency. Agency evaluations would be published and publicized so that foreign and local investors can use these data for making investment decisions;
3) to make the obligatory, by business legal entities, risk analysis before the initiation of investment projects, in order to estimate the potential risks and implementation of relevant methods to diminish them in accordance with international practices. This procedure need to be stipulated in the investment law.
References
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