ELEMENTS OF ANALYSIS OF THE SUSTAINABILITY WITHIN THE AUDIT OF THE PUBLIC DEBT

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Abstract

The overall objective of the audit of the public debt is to evaluate the administration and management of public debt by the Ministry of Public Finance through the analysis of its sustainability, as set by the guidelines on public debt management, reviewed, complied by the International Monetary Fund and World Bank in March 2014.

In this present work, analyzing the public debt indicators (evolution of public debt to GDP ratio - the most widely used indicator) have allowed me to have a first approach in terms of its sustainability.

Other additional/related indicators (public debt/exports, external public debt/exports ratio) provide certain signals about the worsening of improvement of government's position, solvency risk and repayment capacity of the country.

The impact of approaching this modern form of audit, the public debt audit, through the analysis of the public debt sustainability indicators, consists finally in giving recommendations, both at governmental level and at the Ministry of Public Finance level.

Keywords: sustainability, audit, public debt.

JEL classification: G18, H63.

1. Introduction

The complexity of the financial markets mechanisms linked to the macroeconomic conditions over the latest decades and the uncertainty about the evolution of sovereign debt crisis require a new approach in addition to the *financial audit of the general account of public debt*, namely *audits on the*

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assessment of economy, efficiency and effectiveness of public debt management. Due to the considerable repercussions of the future debt service on the public budgets, especially the local ones, the public debt performance audit is a novel and actual issue in the field. The impact of addressing this modern form of audit involves providing recommendations to the main loan authorizing agencies designed to avoid entry into insolvency of administrative-territorial units, by attempting to treat this type of audit as a tool to balance between minimizing the cost of public debt and minimizing the exposure to financial risks.

2. The conceptual and legal framework regarding the audit of public debt

In this context, the XV Congress of INTOSAI (International Organization of Supreme Audit Institutions) in 1995 adopted the rules for defining the public debt and for preparing the audit reports on public debt. At the XVI Congress in 1998 it has approved additional rules for determining and evaluating public debt. Later, the rules were developed into guidelines for auditing public debt that were meant to ensure the promotion of a healthy management and related reporting. In 2007, the Management Board of INTOSAI decided to approach two themes regarding the public debt audit: the management, accountability and audit of public debt and the performance evaluation systems for public debt management on the basis of key indicators. They proved to be essential for the audit of public debt in the current circumstances, and had a significant impact on the INTOSAI member countries.

In the European Union, as according to Art. 1 par. (5) of Regulation (EC) No. 479/2009 of 25 May 2009 on the Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Communities, republished, the concept of *public debt* is defined as "the total gross debt outstanding at the end of the year, at nominal value, in the government sector, except for liabilities whose financial assets are held by the government sector." In our country, according to Art. 2 par. 2 letter (a) and letter (h) of Government Decision No. 34/2009, the Ministry of Public Finance performs the strategy function, by providing the development of public debt strategy and the public debt management function. Because of fiscal imbalances generated by significant excessive government spending, budget revenue overstatement, and given the existence of numerous budget amendments

having as impacts increase in and reallocation of expenditures, the Law No. 69 of Fiscal Responsibility was enforced in 2010, which regulated the requirement to the Ministry of Public Finance to submit to the Government the **fiscal budgetary strategy** for the next 3 years, including "the macroeconomic framework underpinning the fiscal policy, the budgetary-fiscal framework with budgetary forecasts and the fiscal policy and a declaration of liability." So far, the Ministry of Public Finance has drafted and proposed to the Government six budgetary strategies, namely for the periods 2011-2013, 2012-2014, 2013-2015 revised 2014-2016, 2015-2017 and 2016-2018.

In accordance with Law No. 94/1992 on the organization and functioning of the Court of Accounts, republished in 2009, "The Court of Accounts may conduct performance audits of consolidated general budget management, and of any public funds"; it has specific roles on "formation and management of public debt and situation of government guarantees for the internal and external loans", and in the public debt domain has the task of conducting the financial audit of the "annual general account of government debt". The Court of Accounts exercises the financial audit of the annual general account of government debt with its own audit standards that have been developed based on the INTOSAI auditing standards; the European guidelines for the implementation of INTOSAI audit standards; the auditing standards of the International Federation of Accountants (IFAC); and the audit best practices in the field. Given the legal authority to conduct performance audits, the Court of Accounts provided in its work programs audits on "Vulnerability assessment and public debt sustainability" for the periods 2000-2009, 2010-2012 and 2012-2014 and a Financial Audit Report of Annual General Account of Government Debt for 2015 at Ministry of Public Finance. The overall objective of the audit work was to evaluate the economy, efficiency and effectiveness of the administration, management and use of amounts from reimbursable financing engaged on contract basis or guaranteed by local government authorities or by the Government through the Ministry of Public Finance (auditee), and to assess the administration and management of public debt by the Ministry of Public Finance through the analysis of its sustainability, as set by the guidelines on public debt management, reviewed, compiled by the International Monetary Fund and World Bank in March 2014.

3. Evolutions and trends of the sustainability indicators of the public debt in Romania

For public debt sustainability analysis, according to the approach of Blanchard in the paper "Proposals for a new set of fiscal indicators" (1990) and due to the difficulty of using other indicators, it was found that the most widely used indicator is the **evolution of public debt to GDP ratio**. It measures the level of debt in relation to the country's economic activity, highlighting the degree of solvency of the country.

It should be noted from the outset that there are several methodologies for determining the public debt, the most used being:

- a) the EU methodology or the Maastricht methodology;
- b) the extended methodology of the European System of Accounts $2010 \, (\text{SEC} \, 2010)$ and
 - c) the national methodology.

Table 1: The public debt and the public budget deficit of Romania reported to the GDP in 2006-2015 (according to the national methodology)

Year	Public debt	Public debt	GDP	Public debt	Public
	(million lei)	(million	(million lei)	reported to	budget deficit
		euro)		GDP (%)	reported to
					GDP (%)
2000	25.288,8	10.485,5	80.984,6	31,2	4,0
2001	33.817,8	12.129,3	117.945,8	28,7	3,2
2002	43.867,4	12.562,6	152.017,0	28,9	2,6
2003	51.363,2	12.492,0	197.427,6	26,0	2,3
2004	55.819,6	14.073,5	247.368,0	22,6	1,1
2005	59.010,9	16.048,2	288.954,6	20,4	0,8
2006	63.340,8	18.730,5	344.650,6	18,4	2,1
2007	82.324,4	22.803,3	416.006,8	19,8	2,8
2008	109.795,1	27.534,4	514.700,0	21,3	5,5
2009	147.329,1	34.832,9	498.007,5	29,6	9,5
2010	194.459,2	45.383,5	523.693,3	37,1	6,9
2011	223.268,0	51.686,0	556.708,4	40,1	5,4
2012	240.842,6	54.382,2	596.700,0	40,4	3,7
2013	267150,8	59569,4	637600,0	41,9	2,1
2014	295578,7	65946,5	670500,0	44,1	0,9
2015	315.838	69.805	712.832	44,3	0,7

Source: Information taken from *The evaluation of vulnerabilities and sustainability of the public debt*, 2000-2009, Romania's Court of Accounts, 2010; *The evaluation of vulnerabilities and sustainability of the public debt*, 2010-2012, Romania's Court of Accounts, 2014; *Performance Audit Report. The evaluation of the public debt management in the period 2012-2014 at the Ministry of Public Finances*, Romania's Court of Accounts, 2015; *Financial Audit Report of the general annual public debt account for 2015 at MFP* Romania's Court of Accounts, 2016 and the Ministry of Public Finances – *The evolution of the budgetary deficit in ESA 2010 system in the period 2004-2015*, revised on 31 March 2016.

In Romania, the ratio of public debt to GDP showed a continuous decreasing trend during 2000-2006 (-12,8 percentage points) and another of continuous deterioration during 2006-2015 (+25,9 percentage points).

The factors that have led to increasing the public debt are closely related to the periods subjected to analysis, as follows: the period 2006-2008 prior to the financial crisis, the period 2009-2011 is that of fiscal consolidation and from 2012 until now we have the period of stabilization of the public debt.

The increase in public debt (from 18.4% of GDP in 2006 to 40%-44% in the last five years) is explained not only by the need to finance the budget deficit, but also by the currency depreciation and higher liquidity reserves of Treasury in order to finance the budget deficit in advance and create a safety buffer to the adverse conditions in the financial markets. The pace of debt growth slowed down, due to higher than expected economic growth, but also because of lower interest paid for loans (from 5.2% in 2012 to 4.5% in 2013), being expected that the significant decline in financing costs recorded in 2013 to be felt more over the time, as the previously issued debt reaches maturity and is refinanced at more favorable costs than today. Positive trends continued also in 2014, which made that at the end of the year Romania to meet three of the four evaluation criteria for the nominal convergence imposed by the Maastricht Treaty: the sustainability of the fiscal position in terms of budget deficit and public debt, stability of exchange rate and convergence of longterm interest rates. After the outbreak in 2009 of the excessive deficit procedure for Romania, the compliance with the recommendations made by the EC and the fiscal consolidation commitments undertaken in the framework of external financing agreements with the international institutions led to the significant adjustment in the share of consolidated general government deficit to GDP, to 2.9% in 2012, 2.2% in 2013 and 1.5% in 2014 and, thus, to

reentering within the limits (3.0%) imposed by the Maastricht Treaty (which made the Council of Europe on July 21, 2013, to approve the termination of the excessive deficit procedure for Romania).

The public debt to GDP ratio, has continued throughout years 2014-2016 to be slightly below 40%, according to the UE methodology (Table 2: The public debt of Romania reported to the GDP in 2013-2015), which is considered by the National Bank of Romania to be a sustainable level, despite the currency risk associated to the majority proportion of debt denominated in foreign currency.

Table 2: The public debt of Romania reported to the GDP in 2013-2015 (according to the UE methodology)

Year	Public debt (million lei)	Public debt reported to GDP (%)
2013	240.777,00	37,8
2014	263.153,40	39,4
2015	270.120,70	38,0

Source: Ministry of Public Finance, February 2017 – Public debt according to the UE methodology

According to the current projections, public debt will be in the coming years at a lower level of the attention limit of 45% of GDP, provided by the Fiscal Responsibility Law no. 69/2010 with further amendments and completions. One of the changes of this law is the introduction, starting with 2014, of some public debt thresholds that trigger various government measures and actions. Thus, according to the normative act, if the public debt exceeds 45% of GDP, but not more than the 50% threshold, the Ministry of Public Finances shall prepare a report on the evidence of debt growth, and presents proposals for maintaining this indicator at a sustainable level; if the indicator is above 50% but it is situated below 55% of GDP, the Government shall freeze the public sector wages and adopt a program of measures to reduce the public debt to GDP ratio. If indebtedness degree exceeds 55% of GDP, the government will initiate actions in freezing social assistance expenditure in the public system. In fact, all these new legal provisions aim to prevent the situation in which the share of the public debt to GDP would exceed the maximum threshold of 60% allowed by the nominal convergence

criteria laid down in the Maastricht Treaty (Bobeș Florina-Maria, Holistica Journal of Business and Public Administration, No. 1/2015)

In the macroeconomic context provisioned by the Ministry of Public Finance for the period 2017 - 2019 it is estimated that the public debt under the national law will stay on medium term at a reasonable level of below 44% of GDP, and the public debt according to the European Union methodology at a level below 40% of GDP.

The moderate growth perspective of the medium-term government debt and the maintenance at a sustainable level perspective is due to the economic growth estimated at an annual average of about 5.5%, and to the relatively stable exchange rate of the RON/euro and also to some budgetary deficits calculated according to the EU methodology of up to 3.0% of GDP over the period 2017-2019 (The Tax and Budget Strategy elaborated by the Ministry of Public Finances for the period 2017-2019).

3.1. Aspects concerning the public debt indicators at the level of the EU states

Regarding the indebtedness degree of the EU-28 member states (the European Union is made up from 28 member states) in 2015, 17 member states recorded a level of public debt above the 60% ceiling set by the Maastricht Treaty, the highest level being recorded by Greece (176,9%), Italy (132,7%), Portugal (129%), Cyprus (108,9%) and Belgium (106%). At the opposite end, the lowest values of the public debt share in GDP were registered by Estonia (9,7%), Luxembourg (21,4%), Bulgaria (26,7%), Latvia (36,4%) and Romania (38%).

Thus, the value of the public debt indicator related to GDP places our country, in the year 2015, among the top five member states with the lowest public debt in GDP.

According to Eurostat, the average level of the public debt in the EU 28 has recorded an increase of 7,71% over the period 2013-2015. At the same time we can also notice a growth trend at the GDP level of 8,08%, which shows that at the level of the EU 28, the growth rate of the economy has exceeded the growth rate of the public debt in the period 2013-2015. However, the average level of the debt-to-GDP ratio in 2015 was 85,2%, level which is well above the 60% of GDP limit, set by the Maastricht Treaty.

With regard to the ratio between the public deficit and GDP at the level of the EU member states, it is found that it falls within the 3% limit of

GDP set by the Maastricht Treaty, as it has decreased from 3,3% in 2013 to 2, 4% in 2015.

There are also countries that have recorded in 2015 a budget surplus: Luxembourg, Germany, Estonia and Sweden (between 1,2% and 0%), but also countries that have exceeded the 3% GDP threshold, such as: Greece, Spain, France, Great Britain, Portugal, Croatia and Slovakia. Romania ranks among the countries with the lowest deficits in 2015, respectively of 0,7%.

Therefore, the Romania's public deficit indicator in relation to GDP for the year 2015 of 0,7% (calculated according to the ESA 2010 methodology) ranks us among the top 3 members states with the lowest GDP deficit.

Although the two indicators analyzed (public debt in relation to GDP and budgetary deficit in relation to GDP) place us well below the limits set by the Maastricht Treaty, in terms of the standard of living of Romania there is a significant gap compared to the EU member states.

Besides the government debt to GDP ratio, one may analyze a number of other *additional/related indicators*, which can provide certain signals about the worsening or improvement of government's position, solvency risk and repayment capacity of the country. In this context, the *ratio of public debt to the income from exports of goods and services (public debt/exports)* can be successfully used as a measure of sustainability as an increase in the indicator at a certain level of interest rate involves increasing public debt at faster pace than the external revenues, indicating that there may be problems regarding the repayment capacity of the country.

As it can be seen from Table 3, between 2010 and 2011, the share of the public debt in exports of goods and services registered a slight downward trend, due to the fact that in the year 2011, the growth rate of the public debt (113,9%) was below the growth rate of the exports of goods and services (119,4%). In the year 2012, the ratio between the public debt and exports of goods and services has registered a slight increase as a result of an increase in the export volumes of around 100,3%, while the public debt grew by approximately 105,2%, this negatively reflecting over the ratio between the public debt and the level of exports. In 2014, as compared to 2013, the ratio between the public debt and the exports of goods and services registered a very slight upward trend of only 0,4 percentage points as compared to the growth rate of the public debt, which recorded an increase of 1,2 percentage points. In the year 2015, the growth rate of the public debt, although it went

downward from 2014, outpaced the growth rate of the exports of goods, whose value was significantly reduced. In other words, the exports had a slower growth pace, while the public debt grew, and this reflected negatively over the reimbursement capacity.

In Romania, the growth of public debt has generally outpaced that of GDP during the period 2010-2014, which reveals that the level of debt relative to our country's economic activity generally showed a rising trend.

It is noted, however, that in 2015 the growth rate of Romania's GDP exceeded that of the public debt, but for the whole period 2010-2015 the public debt had a faster growth rate than Romania's GDP.

Based on this analysis, we can say that in terms of rate of growth of public debt ahead of economic growth, Romania's solvency risk will increase.

Table 3:The public debt reported to the income from exports of goods and services in 2010-2015

Year	Public debt (million lei)	Exports of goods and services (million euro)	Public debt reported to exports of goods and services (%)	Growth rate of public debt (%)	Growth rate of exports of goods and services (%)	Growth rate of GDP (%)
2010	45.383,5	43.982,0	103,2	131,9	121,7	104,5
2011	51.686,0	52.528,0	98,4	113,9	119,4	106,3
2012	54.382,2	53.472,0	101,7	105,2	100,3	105,5
2013	59.569,4	57.306,0	103,9	109,5	107,2	106,9
2014	65.946,5	61.687,0	106,9	110,7	107,6	105,2
2015	69.805,0	54.597,1	127,86	105,9	88,5	106,31

Source: Information taken from *The evaluation of vulnerabilities and sustainability of the public debt*, 2010-2012, Romania's Court of Accounts, 2014 and *Performance Audit Report. The evaluation of the public debt management in the period 2012-2014 at the Ministry of Public Finances*, Romania's Court of Accounts, 2015.

The *external public debt/exports ratio* measures the external debt as part of exports of goods and services and shows the debt burden of exports, reflecting its ability to refinance. The indicator is influenced by the volatility of prices of exported goods and services and may be less credible under

circumstances related to exchange rate change. Another useful indicator in analyzing the evolution of external public debt and assessing the payment capacity is the *ratio of external public debt to GDP*, defined as the ratio of the balance of external public debt outstanding loans at the end of year and GDP, not influenced by the level of exports. Both additional indicators of public debt sustainability analysis reflect how much of GDP should be sacrificed in one year to fully repay the debt in that year.

Finally, another important indicator refers to the percentage of project funding in the total internal and external public debt. As regards the direct internal public debt, during the period 2000-2014 it was used almost entirely for funding the state budget deficit and public debt refinancing, the funding of projects having an insignificant share of 0,1% in the total internal government debt. The policy of state borrowing, however, should be directed to the productive expenditures, namely to investment in human resources, in infrastructure, research, technology and advanced techniques and other activities beneficial in the long term, which may ensure in the future both debt repayment and payment of interest on the bonds issued and the development of the overall economy. In the case of the external government debt, the share of funding for projects registered a growth trend during 2000-2008, but since 2009 this trend has reversed, so that in 2010-2014 only a percentage between 23,0 % and 43,8% of the total external public debt was allocated for financing projects, and in 2014 the share of foreign loans contracted to finance priority projects for the Romanian economy in the total external debt registered the lowest level, i.e. 23,0%. In absolute terms, the external government debt contracted to finance projects increased during 2009-2012, falling in the next years. The low level of contracting foreign loans to finance investment programs/projects viable on long term and able to generate economic progress leading to increased production, and thus to creating new jobs to achieve sustainable growth and contraction with preponderance of foreign loans to finance the state budget deficit and public debt refinancing, stresses the trade imbalances.

4. Recommendations of the public debt audit at governmental level and at the Ministry of Public Finance level

The impact of approaching this modern form of audit, the public debt audit, through the analysis of the public debt sustainability indicators, consists finally in giving recommendations, both at governmental level and at the Ministry of Public Finance level.

Following the conducted analyses, the recommendations of the public debt audit reports have targeted a number of issues which must be considered at the *government level* (*Performance Audit Report. The evaluation of the public debt management in the period 2012-2014 at the Ministry of Public Finances*, Romania's Court of Accounts, 2015):

i) the need to apply by the Government of concrete steps towards reducing public spending and stimulate economic growth, to counteract the negative effects of high debt; ii) measures on the appropriate policies to address fiscal sustainability, given the overall strategy of the European Union focused on 3 components: debt reduction, increased productivity and the employment and reforming of pension and care systems; iii) continue and accelerate the structural reforms, improve the absorption of European funds and revival of economic activity internationally and of public investment - in terms of the macroeconomic program and preventive financial assistance signed with international lenders (IMF and EU) and following the implementation of the measures agreed under the precautionary financing package; iv) the obligation to achieve the medium-term objective regarding the structural deficit (1.0% of GDP), according to the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, signed by Romania in March 2012.

At the level of the Ministry of Public Finances, the public debt audit reports focused on the following aspects:

- achieving some medium-term budgetary objectives in order to ensure a downward trend for the public debt through strictly respecting the fiscal policy rules;
- analyzing the concrete and possible possibilities for reintroducing the mandatory approval of the leverage ceiling by law, in order to control the growth of the public debt. Taking into consideration the insurance of a sustainable medium-term and long-term public debt level, it is required that the tax consolidation process to level the level of the public debt to shares less than 40% of the Gross Domestic Product (GDP);

- identifying the concrete and possible ways of reducing the costs of the public debt instruments and mitigating the risks involved;
- considering the evolution of the pension funds with an important role in the development of the government securities market, the still untapped potential offered by the private pension funds, as well as the preference for the long-term investments of this category, it is necessary to extend the maturity of the government securities, issuing, in addition to the treasury bills, government bonds, with maturities of up to 15 years and even with longer maturities;
- expanding the investor base on the local government securities market by increasing the share of the non-resident and non-bank investors in order to achieve the objective of developing the local government securities market, given the role that they can play in mitigating external shocks, as well as ensuring a sustained demand for the government securities;
- assuming a pro-active role by the Ministry of Public Finances, as sole administrator of the government public debt, in the process of implementing the projects financed by loans contracted from international financial institutions and commercial banks, given that the structural reforms in the key economic sectors, such as in health, education and social inclusion will continue to be financed by loans.

5. Conclusions

Given the problems faced by most states due to the high levels of public debt, we believe that the sustainability of the public finances must represent a major challenge in the public policies of the states.

Analyzing the public debt indicator in relation to Romania's gross domestic product in the year 2015, it is found that, according to the national legislation provisions, it had a level of 44,3%, and according to the EU methodology it has recorded a level of 38%, thus placing us below the 60% threshold set by the Maastricht Treaty and among the top 5 Member States with the lowest public debt in the GDP from EU28.

The Romania's public deficit indicator in relation to GDP for the year 2015 of 0,7% (calculated according to the ESA 2010 methodology) ranks us among the top 3 members states with the lowest GDP deficit.

Although the two indicators analyzed (public debt in relation to GDP and budgetary deficit in relation to GDP) place us well below the limits set by

the Maastricht Treaty, in terms of the standard of living of Romania there is a significant gap compared to the EU member states.

The analysis of these indicators, as well as of other associated indicators (public debt/exports, the percentage of project funding in the total internal and external public debt) in the case of the Romanian economy, highlights a series of persistent problems and imbalances, which are related to the structure of the economy, capable of affecting the development of the country on a medium and long term:

- an increase in the country's solvency risk, in the conditions of a growth rhythm of the public debt which outstrips the growth rhythm of the economy;
- the growth rhythm of the public debt, which is higher than the growth rhythm of the exports, is negatively reflected over the country's reimbursement capacity;
- the low level of contracting external loans intended to finance some long-term viable investment programs /projects that would generate economic progress, and that would lead to increasing production, and implicitly to creating new jobs, in order to achieve a sustainable economic growth through mainly contracting foreign loans to finance the state budget deficit and to refinance the public debt, accentuates the trade imbalances.

In view of the above, it is necessary that Romania's economic policy to be concentrated towards increasing the gross domestic product - GDP, both through the development of the industrial sector and of the agricultural sector, and also by continuing to invest in the construction and services domain.

Regarding the *public debt management performance evaluation* systems, ISA needs to play a significant role in improving the public debt management by examining the efficiency, effectiveness, and economy of the public debt-related operations. Although the public external auditors cannot dictate the policies concerning the public debt, in the virtue of their legal mandate, they may, however, promote the improvement of the existing legal framework and can make recommendations to the public debt managers to adopt sound management practices that would reduce the costs and financial risks associated with the public debt. If the results of the financial audits were to be submitted to the Parliament in a timely manner, ISA could play a proactive role; the potential problems being able to be addressed before the public debt levels become unsustainable, thus avoiding risky decisions that would generate an economic, fiscal or financial crisis.

The impact of approaching this modern form of audit, the public debt audit, through the analysis of the public debt sustainability indicators, consists finally in giving recommendations, both at governmental level and at the Ministry of Public Finance level.

6. References

- 1. Blanchard, O. J. (1990) Suggestions for a New Set of Fiscal Indicators, OECD Economics Departament Working Paper 79, OECD Publishing.
- Bobeş, F. The Financial-Economic Crisis and Public Debt Sustainability, published in Holistica Journal of Business and Public Administration, Editura Uranus, Year 6, No.1, January-April 2015, ISSN 2067-9785.
- 3. Fiscal Responsibility Law no. 69/2010.
- Law no. 217/2008 for changing Law No. 94/1992 on the organization and functioning of the Court of Accounts.
- Ministry of Public Finances (2016) The evolution of the budgetary deficit in ESA 2010 system in the period 2004-2015.
- 6. Ministry of Public Finances The Tax and Budget Strategy for the period 2017-2019.
- Romania's Court of Accounts (2010) The evaluation of vulnerabilities and sustainability of the public debt, 2000-2009.
- 8. Romania's Court of Accounts (2014) The evaluation of vulnerabilities and sustainability of the public debt, 2010-2012.
- 9. Romania's Court of Accounts (2015) Performance Audit Report. The evaluation of the public debt management in the period 2012-2014 at the Ministry of Public Finances.
- Romania's Court of Accounts (2016) Financial Audit Report of the general annual public debt account for 2015 at the Ministry of Public Finances.