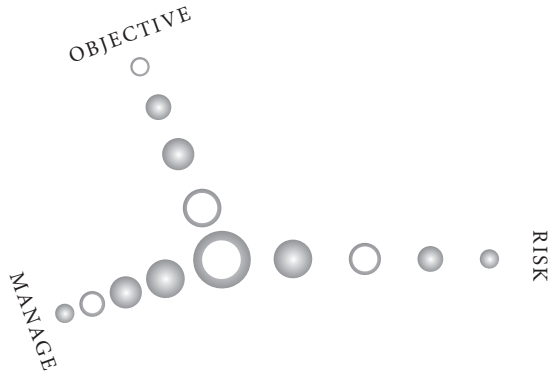

Public debt and the challenges of its administration in our country

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Abstract

Public Debt (also known as Government Debt) is considered a key element as well as an integral part of the macroeconomic development, which includes the stabilization of loans, payments of the debt service and its final repayment. All these serve the purpose of promoting economic growth, the reduction of poverty and a stable economic development. It represents a mean, which if used properly and efficiently gives a positive incentive to the economic growth. In case it is used improperly it might go so far as to bring the country to the limits of a financial crisis.

Is the present level of Government Debt in Albania problematic or not? Does the service of Public Debt present threat, considering the financial crisis of the year 2007-2008 which we are still undergoing? This paper seeks to answer these questions as well as other questions related to the challenge of the administration of Public Debt.

This paper will be written in the form of an analysis for the economic stability,

public debt as well as the determinants of the government borrowing, giving the respective conclusions and recommendations in the end.

It will also present the time structure of the debt, the minimization of the debt's cost and the techniques of identification, measurement as well as the control risks of Government Debt. To enable the presentation of a clear panorama of the situation of Public Debt, as well as its performance in the future, in parallel with the qualitative evaluations, a considerable part of the material consists of ascertainment and quantitative analysis. Thus from our point of view the indices of the deficit as well as of the debt, are an essential index of the limits that a government, already member of International Institutions such as IMF, the World Bank, also aspiring to join the EU, might keep the budget deficit and its monetization.

Key words: Public Debt, budget deficit, government borrowing, cost of debt.

1 Introduction

Public Debt (also known as Government Debt) is considered a key element as well as an integral part of the macroeconomic development, which includes the stabilization of loans, payments of the debt service and its final repayment. All these serve the purpose of promoting economic growth, the reduction of poverty and a stable economic development. It represents a mean, which if used properly and efficiently gives a positive incentive to economic growth. In case it is used improperly it might go so far as to bring the country to the limits of a financial crisis. **Public Debt** or *national debt* is the debt owned by a state or a government (at central or local level) at a given time, and generally represents **budget deficit** accumulated and financed through borrowing.

Budget deficit in governmental accounting is a financial state according to which government receipts and expenses are much higher than its incomes. This difference is mainly financed by the public through investment in different debt instruments that the government issues such as: treasury bills, government bonds etc. Both above mentioned indices have a cause and effect relation, because budget deficit is financed by debt and on the other hand, the debt itself includes costs that become a burden for the next governmental expenses, thus becoming an influencing factor on the deficit. As far as political views are concerned, the reduction of the budget deficit by commitment for reductions of governmental spending and the reduction of public debt by strategies of increasing its efficiency make up the essence of marketing for "good governing". However this is actually a chronic concern whose consequences become present in case of a crisis, as we are now. From our point of view, deficit and debt indices, in essence are the limits to what levels should a government keep its budget deficit and the level of its liquidity, especially a government which is a member of the International Institutions such as: IMF, World Bank, etc, aspiring to join the EU. Is the present level of Government Debt in Albania problematic or not? Does the service of Public Debt present threat, considering the financial crisis of the year 2007-

2008 which we are still undergoing? This paper seeks to answer these questions as well as other questions related to the challenge of a good administration of Public Debt.

This paper will be written in the form of an analysis giving the respective conclusions and recommendations in the end. To enable the presentation of a clear panorama of the situation of Public Debt, as well as its performance in the future, in parallel with the qualitative evaluations, a considerable part of the material consists of ascertainment and quantitative analysis. In order to better fulfil the requirements of a case study the paper includes different materials from the Ministry of Finance, Bank of Albania, the World Bank and IMF.

2 Critical dependency of the budget deficit and public debt

The relation cause- effect between deficit-debt is one of the most observed directions for the performance of a Government, be that involved in business cycles with normal performance, or in other cyclic more sensitive stages that convey crises. Specifically the principal directions of more importance in the scale of functional dependency among budget deficit, debt and the borrowing capacity of the government influence these trends of concern:

- the increase of the debt as a result of covering the increase of budget deficit is done with the argument that the addition of expenses will influence the increase of GDP and the increase of GDP with a constant level of taxes will increase the government's cashing to serve debt settlement without a problem. The most important recommended indicator is marginal analysis of the debt according to the basic ratio: ΔDebt/ΔNet Income

If this ratio increases progressively then the rational decision to increase governmental borrowing faces the challenge of insecurity to increase income. In short term the increasing influence of the GDP comes because of the component G (governmental expenses), but on the other hand the deficit is deteriorated (G-Tx), thus creating a vicious circle to find the solution in re-borrowing until the borrowing capacity is over, causing a crisis which goes beyond governmental context by creating a more problematic stage of **risk for the country**.

- The above mentioned problem increases the burden of the debt or the debt burden, the sacrifice that the citizens of a country need to go through to face public debt repayment. This incites the government to sell its assets through privatization tenders when cash from these privatizations refill the financial vacuums created by the debt.
- Considering countries of emerging economies which are out of the Euro zone area, like Albania, the problem also lies in the preservation of the

purchasing power of the national currency, thus the Lek. The increase of the budget deficit, because of the increase of the expenses or the decrease of the taxes, increases fractionation of the currency in circulation. On the other hand any additional unit of deficit monetization with debt, increases the monetary unit together with the risk of a moral setting for the Bank of Albania, as a failure to achieve its mission on price stability, thus going out of the critical control of inflation.

- The problem of debt service or interest payments. Considering the fact that the Albanian government is a borrower, its behaviour tends to increase the prim of inflation to reduce the cost of repayment through reduction of the real interest rate. From the economic viewpoint interest payments under the conditions of inflation are considered as repayment of the principal amount of debt[1]. For this reason, defining the real rate of repayment requires correction of the inflation rate. This means that the borrowing investors "pay" the government by cashing money in a reduced purchasing power, creating losses.
- The last source of repayment on behalf of the government is the alternative of tax increase, meaning that the public as an investor/ financer of the debt learns to perceive what is known as Richard's equivalence. The Albanian economy must pass from borrowing for financing consumption to an extension of the increasing resources, improvement of competitiveness and increase of exports. This requires continuous improvement of the business climate as well as the support of the investors"[2]. As far as the above mentioned points are concerned, structural indices of the debt include the following main concerns:

Firstly: there is a high risk of liquidity, because the government keeps a high burden of the short term debt, what is more an increasing one (+1%) and a low burden of the long term debt.

Secondly: because the short term debt has the highest burden, this means that our economy is not being restructured towards investments. The fact that 60% of the debt is completely financed by the banking system, where only a Bank like Raiffeisen has more than 34,5% of the debt's financing, shows a high stage of concentration and dependency. Thus the portfolio of the assets of the RBAL tends towards investment without credit risk, but with the risk of inflation. This means that on one hand the government has a high dependency on only one bank, but on the other hand RBAL is exposed for more than 40% of the portfolio under titles free of risk with an average efficiency of about 8%. In real terms this means that when inflation tends to be near 8%, it creates an economic benefit almost zero per RBAL.

Thirdly: the structure of the debt creates a high opportunity cost. The government is considered to be the biggest borrower of the banking system and it finances 60%

1 Alen S. Blinder, William J. Baumol 'Economics' 2008 Harcourt Brace Jovanovich.

2 Citated from Bank of Albania report.

of its debt. This means that the banks wear away their monetary unit giving it as debt to the government to the amount that the available funds are reduced to lend them to the economy, thus to credit private business. The conflict is seen in response to the question whether the economy or the government is a more efficient user of credit banking?

Fourthly: Banks risk to create a moral hazard for the fact they tend to lend nominally to the government under the cost of not lending to the public. Because a low availability of funds remains to the bank, the level of risk concentration per unit of a given loan is increased, which increases the cost of credit in the economy overall. The differential of the interest rate in loan per economy is twice higher than that of the loan to the government.

Fifthly: An optimal decision of the banks to choose investment on treasury bills is a signal of liquidity crisis, for the fact that banks accept missing earnings (additional opportunity costs) only for the sake of possessing the most possible instruments with high liquidity, such as with the treasury bills.

Sixthly: the most negative phenomenon that has emerged is the fact that while the banks have reduced the burden to government crediting, non-banking institutions as well as the individuals have increased this burden with (+2%). This removes the risk burden towards the most vulnerable part of the economic structure.

Finally, the whole cost of this debt has a rational tendency to face the increase of the taxes, or the decrease of governmental expenses. The latter being considered as a short term alternative, but in the medium term period the burden of the debt requires the indispensability of tax increase. This will create a cyclicality that will create a burden upon the businesses, the public once more.

3 Improvement of the quality of government borrowing and exposure to risk

While continuing the above mentioned issues we have to take into consideration the fact that budget deficit is financed in any case. The problem lies on how budget deficit quality is and whether the government lends by issuing debt instruments of the money market (short term borrowing, through issuing treasury bills) or the market of capitals (long term borrowing, through issuing bonds).

From our analysis it results that:

1. If the economy is expected to have a lower level of the savings aggregate and a higher level of government borrowing, then the price of loans for private businesses will increase, so interest rates are increased and the phenomenon of **crowding out** investments in the private sector will emerge. This kind of situation is found in facilitating fiscal policies before expansionism, where the increase of expenses, deficit and borrowing of

the government does not lead to an increase of the aggregate of demand (output). Although an expansionist fiscal policy in increasing deficit and debt for governmental expenses at first sight should influence the increase of the aggregate for the requirement for goods, money (GDP increase) which on its behalf incites output. We are currently at a situation when the increase of the expenses of the government is compensated the same even by the adverse impact of the decrease of exports and expenses that the private sector has for investments, by exports and expenses that the private sector does for investment, smoothing the influence of the increase of governmental expenses in the aggregate of demand (output). The most obvious risk is related to the fact that the influence of budget deficit and public debt are read as discouraging for investments and retarding for the increase of national capital, which is easily noticed even in both latest reports of Bank of Albania which calls for the banks to increase crediting in the economy, while crediting in the economy has a high interest rate for two main reasons: (a) the increase of costs when there is lack of liquidity, on the part of deposits and lack of credit cash; (b) the increase of the inflation risk. The increase of the interest rate delays investments and their delay decelerates output increase, decreases *supply aggregate* and consequently the result is a lower potential level of the Gross National Product (GNP). A deeper analysis arguments that if the increase of government investments incites the private sector not to invest, then this sector does not invest money on the financial market, they retreat by the market even the ones they have which is otherwise called "*crowding* out".

2. A high government borrowing in the long term performance will impose an increase of the burden of the taxes, which on its own will target the aggregate of demand and will impinge economic growth. In our conditions when currently our business cyclicality tends towards recession, this will influence the increase of the taxes, the increase of the burden of the taxes, fiscal evasion as well as the behaviour of firms to fiscal evasion. Under these circumstances the elements of the cost risks for the government appear even as *international crowding out*. By specifically analyzing the budget structure into internal and external debt, short term and long term, in concessional and non-concessional debt, in a debt with fixed or variable interest rates, etc it results that Albania has considerably serious challenges for the expected impact.

Firstly, according to the economic and financial programme of Albania for the upcoming years, repayment of the loan taken from the crisis of the recent years, as well as the common interests of the existing debts, will require a general amount of money of 90.4 billion Leks, or about 700 million Euros based on the current rate. From these 32.7 billion Leks or 250 million Euros, will have to be paid as principal and interests for the loan taken for the Durrës-Kukës highway.

Secondly, the portfolio of the government's debt tends towards a high risk

composition. We saw short term domestic borrowing and foreign currency borrowing has a resultant influence that lead to:

Analysis based on simulations cost/risk. Based on this analysis we notice that the structural factors that increase risk include:

- The increase of the external non concessional debt, the increase of the debt in Euro, exposure to risk of the exchange rate as well as the risk of non creating refinancing power of the internal debt.
- Anticipation for avoidance of a financial blow, because a high risk of refinancing might create premises for systemic risk.
- Because the major part of the debt consists of the internal short term debt exposed to the changes of the interest rates, or to the external debt exposed to changes in the exchange rate, the existing risks of the debt are considerably high. This might cause great fluctuations in the debt services.

The attempt to issue Eurobonds is still under way. On the other hand the amount of 700 million Euros creates difficulties for the budget. The challenge is twofold:

- Response of the international financial market, so if the government is able to attract purchasers for the Eurobonds it aims to issue;
- The role of the Central Bank to preserve sustainability and stability of the currency Lek.

Thirdly, in case the government will have no money to repay the debt in 2012, according to the contract, interests will increase and the deadline will be extend for two more years. The common solution in such a case remains the "programme of structural regulations" through the International Monetary Fund. IMF on its own will recall on the above directions that impose a stabilizing program, shortly the final stage of the fiscal expansion policy. This is the beginning of a solution between two pillars of the economic, fiscal and monetary policy.

4 Suppositions of the strategy for 2010-2014

The debt management strategy must be based on the evaluation of the expected costs and the risk characteristics of different possible loan strategies. The General Directory of Debt Management has thus developed a model for the medium term debt strategy following the general concepts of the MTDS model of the World Bank. The model allows for different loan strategies, exposing them to several fiscal and macroeconomic shocks and by measuring costs and risks related to the strategies as well as with the debt reports of GDP. The MTDS model specifies as follows:

- The data are based on a trimester period from 2010-2014.
- The debt data and the current guarantees used for MTDS for repayments

and fixed interest payments are exposed by DMFAS (external debt) and from excel for internal debt.

- Projected disbursements of the debt and the guarantees for their repayment, as well as fixed interest payments have been exported to MTDS.
- The variable interests in the current debt and guarantees have been calculated by MTDS.
- Loan simulations have been based on the evaluation of the loan requirements in the medium term budget.
- MTDS allows simulation in the internal instruments as well as for financing projects in Euro by having fixed or variable interest rates and in Eurobonds in Euro by having simulations with different maturities.
- MTDS calculates repayments and interest payments for the simulated loan as well as the total debt (including the current debt)
- For each borrowing strategy, MTDS calculates the expected cost (interest payments + reassessment of the exchange rate) and risk (deviations from expected income)
- Reassessment of the exchange rate calculated based on cost, i.e. when there are changes in the exchange rate, which influences the total debt of the respective currency.
- Despite the costs and risk or any borrowing strategy, MTDS also calculates the matured related risks for each year during the whole period of simulation.
  - The debt/GDP for the debt which includes and excludes the guarantees
  - Percentage between the internal/ external debt
  - Duration
  - Risk of refinancing

The strategy has been based on the macroeconomic and fiscal predictions presented at the review of the macro framework for the years 2010-2013, realized in January 2010[3]. Projections for the other years were added based on their trends thus allowing a perspective at a medium term period.

The exchange rate norm and the internal interest norm are supposed to remain unchangeable during this period. The short term interest norms at the international market are supposed to be increased gradually from the lowest existing level to a normal level of 4-5%, whereas the long term norms of interest in the international market are supposed to be increased slightly approximately up to 1% for all the period. The fixed interest norm for disbursement in loans for projects is expected to be increased up to 4-5%. The interest norm for external commercial borrowing is

3 It refers to a macro framework reviewed in Januar y 2010.

expected to be about 7-8%.

Stress scenarios

Based on a stress scenario it is supposed that the nominal increase of the GDP is 4% for the period from 2010 to 2014, the fiscal balance sheet is deteriorated with more than 5% of the GDP, the exchange rate of Lek is subject to a depreciation of 30% as compared to all the other currencies, interest rate norms for the short term internal debt are subject to a shock, thus a shock of about 400 points in percentage. The interest rate norms in the international market, including the interest rate norms of the external commercial debt offered to the government, are not presupposed to change compared to the base scenario.

4.1 Sensitivity of macroeconomic and fiscal developments

According to the simulations, the ratio debt/GDP will reduce to 54% at the end of 2013. The state guarantees will reduce from 4% of the GDP to about 2.8% at the end of this period as a resulting of non issuing guarantees any more, despite the guarantees in 2010. The development of the ratio debt/GDP is generally the result of the existing debt performance, the primary balance sheet as well as the GDP. The simulated developments of the debt GDP show a reduction of the debt during the period. However if the macro and fiscal developments follow a route which is not favoured in the upcoming years, progress of the ratio debt/GDP might increase fast. In the test scenario it can be noticed that the ratio of the debt to GDP is calculated at about 120%. This scenario shows how sensitive the ratio debt /GDP is to the macroeconomic and fiscal developments of the country. Just like in the base scenario this progress is similar to all the strategies.

Strategy 1. Short term domestic debt

This strategy is focused on short term domestic loan, including borrowing at variable interests, completed with financing of projects which have variable interest rates. As a result the risk of domestic refinancing as an amount of the debt being matured and being subject to fixed interests within 12 months, would increase further at high levels. The index of domestic debt "duration" will reduce to approximately 0.5 years and the total debt will reduce to further more than a year and six months. The tendency for reduction of the amount in Lek of the debt is the result of the fact that during the years 2010-2011 all the increases in capital expenses have been financed through loans of foreign projects bilateral or multilateral creditors, as this will assure the most efficient financial sources for the government. The expected cost for this strategy is the result of a supposition of a domestic interest rate not variable over the period of time with a considerable spread of 4.5% ranging from the shortest to the longest maturations. However within a stress scenario, interest payments over the whole period might increase with more than 50%, by expressing the risk of interest in the budget's portfolio.

Table 14.1 — *Costs and risks for the simulated period*

	In billion leks	Increase in %
Base scenario		
Interest payments	256,5	
Stress scenario		
Increase in interest payments	133,3	52,0
Effects by the exchange rate	74,7	
out of which, realised:	19,7	

Strategy 2. Long term domestic debt

This strategy focuses on domestic borrowing through fixed liabilities filled in by financing the projects with fixed interest rates. This strategy includes long term duration, but to a certain extent not realistic, as long as domestic market currently does not allow the absorption of this amount of long term borrowing. Compared to the option of short term borrowing this strategy includes a considerable reduction of the risk of domestic refinancing as well as a considerable increase of the duration of the total debt and the domestic one. The expected costs for this strategy are higher than those of the short term domestic debt, because of the not variable suppositions and the high interest rate of the long term domestic debt. However the risk measured in interest payments for the stress scenario, is expected to be low, about 30% compared to about 50% in the short term debt scenario.

Table 14.2 — *Costs and risks for the simulated period.*

	In billion leks	Increase in %
Base scenario		
Interest payments	290,2	
Stress scenario		
Increasein interest payments	91,7	31,6
Effects by the exchange rate	74,7	
out of which, realised:	19,7	

Strategy 3. Short term external debt

In this strategy a considerable part of the borrowing requirements is financed through commercial borrowing in the foreign market (300 billion Euros per year), completed with domestic borrowing and the expected financing of projects. Borrowing has a short duration. As far as the above mentioned is concerned, the part of the debt in the domestic currency is reduced considerably, but because of the great continuous stock of the short term domestic debt, the risk of domestic refinancing increases during the period of simulation. Duration for the domestic debt and the total debt is subject to reduction.

This strategy insures lower expected cost, because of the relatively favourable

interest rates of external commercial borrowing compared to the interest rates of the domestic market. However, because of the short term focus, the risk of interest rates is high, 47.1% and in addition to that the risk of the exchange rate is considerably higher than the other two borrowing options.

Table 14.3 — *Costs and risks for the simulated period*

	In billion leks	Increase in %
Base scenario		
Interest payments	242,5	
Stress scenario		
Increase in interest payments	114,3	47,1
Effects by the exchange rate	87,0	
out of which, realised:	19,7	

Strategy 4. Long term external debt

This is a similar strategy to the previous one, but borrowing has a longer duration all over the markets, consequently it reduces the risk of refinancing. At the same time it has a considerable risk of the exchange rate. In this strategy the external commercial borrowing primarily leads to a reduction of the stock of the short term domestic debt while even domestic financing in the liabilities market is reduced. Consequently, the risk of domestic refinancing has been reduced gradually, while the duration of the domestic debt and that of the total has been increased. The expected cost of this scenario as well as the risk of the exchange rate are relatively higher, bur interest risk is low, 33.5%. This option is presented efficiently at cost and it is more realistic compared to the other long term options, which are entirely focused on long term domestic borrowing.

Table 14.4 — *Costs and risks for the simulated period.*

	In billion leks	Increase in %
Base scenario		
Interest payments	270,9	
Stress scenario		
Increase in interest payments	90,9	33,5
Effects by the exchange rate	87,0	
out of which, realised:	19,7	

5 Conclusions and recommendations

- Public borrowing serves as a bridge between income and expenses. The portfolio of public debt is built based on the combination of different financial instruments in long terms and short terms, with fixed and variable interest rates.

- The debt is a contractual liability which must be paid with interest as defined in the terms of Credit Agreement, which is a legal document.
- Borrowing procedures must be used efficiently and effectively to make sure that the increase of service liabilities of the debt does not damage the finances of the state.
- The establishment of a legal environment to contract domestic and external borrowing, as well as the issue of guarantees, is an indispensable step for the successful management of the budget.
- The objective of debt management is the design and implementation of a strategy for debt management, which corresponds in time with the necessary financial indices in order to implement the budget efficiently.
- The role of public debt strategy which is mainly oriented towards the increase of the maturation terms, the gradual increase of liquidity especially of the external debt by tempting to avoid the concessional terms of the official creditors and at an optimal composition of the currency of the external debt, enables the debt management to have sustainable objectives as far terms are concerned.
- Problems which public debt management faces will be listed below: the lack of a secondary market i.e. that of the capital a considerable amount of the debt is withheld by the second tier banks, as well as the low level of borrowing by the public.
- In the meantime some of the precautions that will influence the reduction of risks that accompany the debt will be: 1.Diversification of the financing instruments, 2. Strengthening of the strategic debt management, 3. Extension of the maturation period, 4. The establishment of a proper structure for the currencies in which external debt is kept.

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