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Fiscal Objectives in the Post IMF Program World: The Case of Albania

Jiri Jonas

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Fiscal Objective in the Post IMF Program World: The Case of Albania

Prepared by Jiri Jonas [1]

Authorized for distribution by
Manmohan S. Kumar

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Abstract

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The paper discusses the challenges facing Albania's fiscal policy following the graduation from the IMF programs. It argues that Albania's public debt remains too high and needs to be reduced. Strengthening the fiscal framework, including by introducing a numerical fiscal rule, could help achieve this objective. The paper discusses two alternative rules, with the objective of achieving a gradual decline in the public debt ratio. One rule would limit nominal expenditure growth, with a correction mechanism to guard against revenue slippages and other shocks. An alternative rule would limit the growth in nominal public debt.

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SUMMARY

Under Fund-supported programs, standard program conditionality—the ceiling on government net domestic borrowing and on non-concessional external borrowing—has served as fiscal anchor. However, following the graduation from the Fund-supported program in January 2009, the question arises, how to best ensure sound fiscal policy and fiscal discipline? Could a numerical fiscal rule that constrains discretion in fiscal policy help ensure long-term fiscal sustainability, while allowing the government to finance the needed expenditure, and eventually creating space for fiscal policy contribution to cyclical demand management? And what specific form of fiscal rule would be most appropriate for Albania?

An increasing number of advanced and emerging market economies have introduced some form of fiscal rule, to mitigate the well-known shortcomings of fiscal policy, deficit biases, and procyclicality. The evidence suggests that fiscal rules could improve fiscal outcomes, but also that such rules cannot substitute for a lack of commitment to fiscal discipline. [2]

In the past decade, Albania's fiscal policy has been fairly prudent, as evidenced by generally declining debt-to-GDP ratio. But more recently, the spike in borrowing to finance large investment project, and the growth slowdown, has pushed the debt ratio up again. Looking ahead, the debt ratio is projected to remain rather high, making Albania vulnerable to adverse shocks. Thus, reducing the debt ratio would seem to be a desirable policy objective. Though it is difficult to pinpoint the exact level to which the debt ratio should be reduced, prudent approach would suggest its reduction to below 50 percent of GDP. Such reduction would require a further sustained strengthening of public finance. The paper discussed two possible numerical fiscal rules that could be introduced to achieve this objective.[3]

One option would be to introduce the expenditure rule. Given the well-known weakness of the expenditure rule, it would need to be combined with a feedback mechanism to correct for adverse debt ratio developments as a result of revenue underperformance or other factors. The paper illustrates how such rule could be specified and calibrated. An alternative option could be to rely on the debt rule. As Albania's growth is projected to remain relatively high over the medium-term, as a result of catching up, the debt ratio could be brought down significantly without the need to reduce the nominal value of public debt, by ‗growing out' of the debt. This could be achieved by following a rule that would set a limit to nominal debt growth below the nominal GDP growth, correcting for possible sustained adverse effects of interest rates and exchange rate movements on debt ratio.

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[2] See IMF (2009) for the recent overview of experience with fiscal rules.

[3] Simulations in this paper are based on data available through 2008 and the precise quantification of the simulation results may change if more recent data would be used.

I. INTRODUCTION

For most of the time since the start of economic reforms in early 1990s, the standard Fund conditionality—the limits on government net domestic borrowing and on non-concessional external borrowing—have helped anchor Albania's fiscal policy. Now that Albania has graduated from the Fund-supported programs and considers accessing international capital markets, the question arises whether it would be desirable to introduce an alternative mechanism to promote sound fiscal policy and fiscal discipline. This paper discusses options for a well-designed numerical fiscal rule that could play this role. [4]

In designing a fiscal rule, it is necessary to consider Albania's specific circumstances and limitations. First, Albania's public debt ratio is relatively high, compared to other low-income and emerging market countries, and should be reduced. Thus, the fiscal rule—if followed— should ensure a sustained reduction in the public debt ratio. Given the projected relatively rapid GDP growth as a result of catching up, this does not necessary imply a reduction in the nominal stock of public debt: Albania could —grow out" of debt. Second, as there is no reliable estimate of potential output and output gap, using fiscal rule based on cyclically adjusted fiscal indicators would be problematic. Third, the rule should take into account the possible output and financial shocks, and provide a degree of flexibility compatible with sustaining the credibility of the rule and fiscal discipline. Finally, given the importance of boosting fiscal credibility and market confidence, the rule should be fairly simple and transparent, to allow monitoring and increase government accountability.

Albania's specific circumstances have also a bearing on the desirable institutional setting for the fiscal rule. It could be difficult to achieve quickly political consensus on the desirability or preferable features of the fiscal rule. Therefore, it could be unworkable to aim immediately for a legally enshrined fiscal rule. Rather, the rule may initially have to be in the form of a political commitment, embodied in the annual budget law. One shortcoming of such an arrangement could be the lack of continuity. As governments change, fiscal rules and fiscal policy targets could change as well. Political commitment does not typically have the same force and credibility as legal constraint with enforced sanctions for violation. But it is also true that political commitment to sound public finance is a *sine qua non* to successful fiscal rule.

Section II provides a brief overview of Albania's recent fiscal performance. In Section III, we provide some arguments in support of the claim that Albania's public debt is too high and

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[4] It could be argued that as Albania enters international capital market, market discipline could be relied upon to prompt the authorities to pursue a sound fiscal policy. However, the experience with market discipline does not give strong assurances that it would be exercised in timely and sufficient manner: too often, market discipline comes —too much, too late" (Willett, 2000).

that it should be reduced to a more sustainable level. Section IV examines different options for a numerical fiscal rule, taking into account Albania's specific objectives and limitations. Two possible rules are identified as worth consideration: an expenditure rule with a debt feedback, and debt rule/primary balance rule. Conclusions are offered in Section V.

II. ALBANIA'S FISCAL POLICY: IMPROVED, BUT VULNERABILITIES REMAIN

Following the turbulent 1990s, Albania's economy has enjoyed a relatively stable and solid performance during the 2000s, supported by improved macroeconomic policy, including fiscal policy. Fiscal deficit peaked in 1997, during the collapse of the pyramid scheme and the Kosovo crisis. At that time, deficits were financed mainly by domestic bank credit. However, starting in 1998, deficits began to decline gradually, from over 10 percent of GDP to below 5 percent of GDP in after 2003 (Figure 1). Domestic bank financing of public borrowing has been reduced correspondingly. Lower government borrowing has allowed public debt to decline from the peak of around 70 percent of GDP (Figure 2). But public debt has remained above 50 percent of GDP, making public finances vulnerable to adverse shocks. Weak growth in 2009 and large borrowing to finance increased public investment pushed the debt ratio to close to 60 percent in 2009.

Figure 1. General Government Budget, 1995-2009 (in percent of GDP)
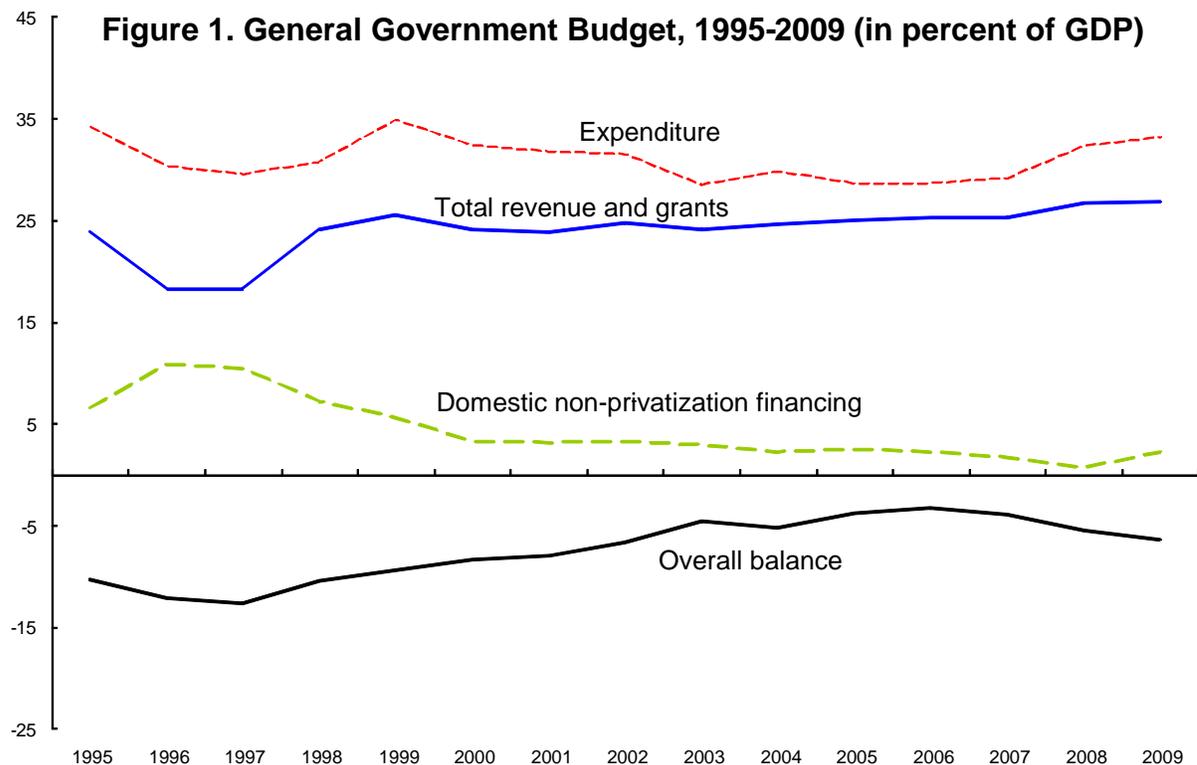
Source: Authorities' data

**Figure 2. Government Debt, 1995-2009 (in percent of GDP)**
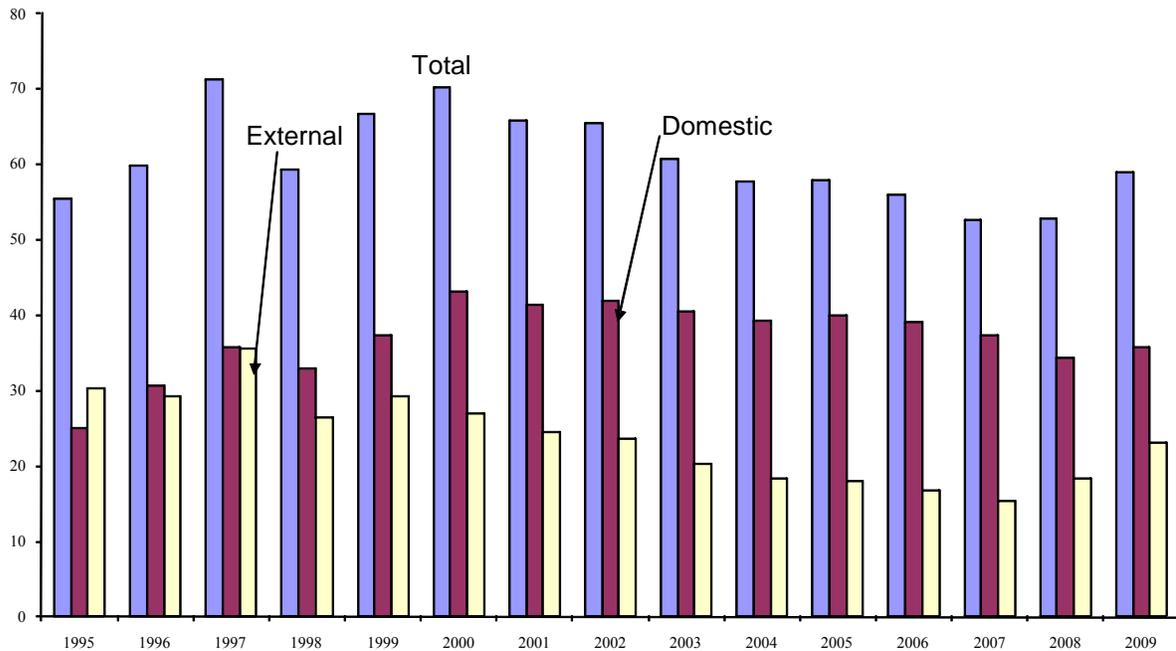
Source: Authorities' data

Following the decline in early 2000s, public expenditure have remained broadly constant around 30 percent of GDP. Spending discipline, together with gradual but sustained improvement in domestic revenue collection, have contributed to the reduction of fiscal deficit by 6 points of GDP between 1998 and 2009 (budget grants have been playing a relatively minor role). Improved tax administration, together with the simplification of tax system, were the main driving forces of the improved revenue performance.[5] The recent increase in expenditure reflects mostly a temporary spike in capital spending associated with a major road investment, and does not signal an underlying weakening of public finance.

Aside from this one-time increase in investment spending, the authorities view the current level of public spending around 30 percent of GDP as broadly appropriate for Albania. Thus, reducing the deficit would require higher revenues. Figure 3 suggests that, given its level of GDP per capita, Albania's tax revenue as a percent of GDP are broadly in line with other countries at a similar stage of development. However, there is also scope for improvement in revenue collection, as illustrated by the relatively low efficiency of value added tax collection in Albania compared to other emerging European countries (Figure 4).

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[5] Recent strong revenue collection may also have benefitted from the significant absorption gap and import boom (VAT on imports is much easier to collect). To the extent that absorption declines or import substitution becomes more important, these ‗low-hanging fruits' will largely disappear.

Figure 3. Tax Revenue and GDP per Capita

R² = 0.3824

Albania

Tax Revenue (% of GDP)

GDP per capita (in PPP)
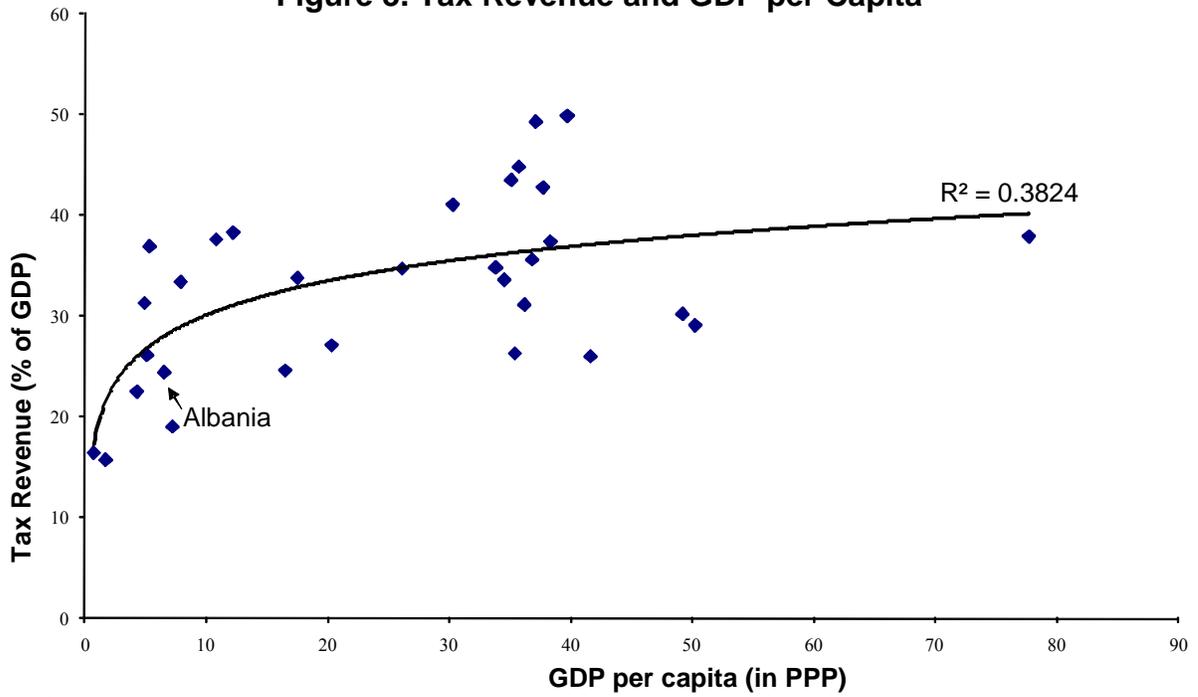
Source: The Economist, 2008, FAD database

Figure 4. VAT Revenue Productivity in Selected Countries 1/

Consumption

GDP

Albania
Belarus
Bosnia and Herzegovina
Bulgaria
Croatia
Macedonia
Moldova
Montenegro
Romania
Russia
Serbia
Turkey
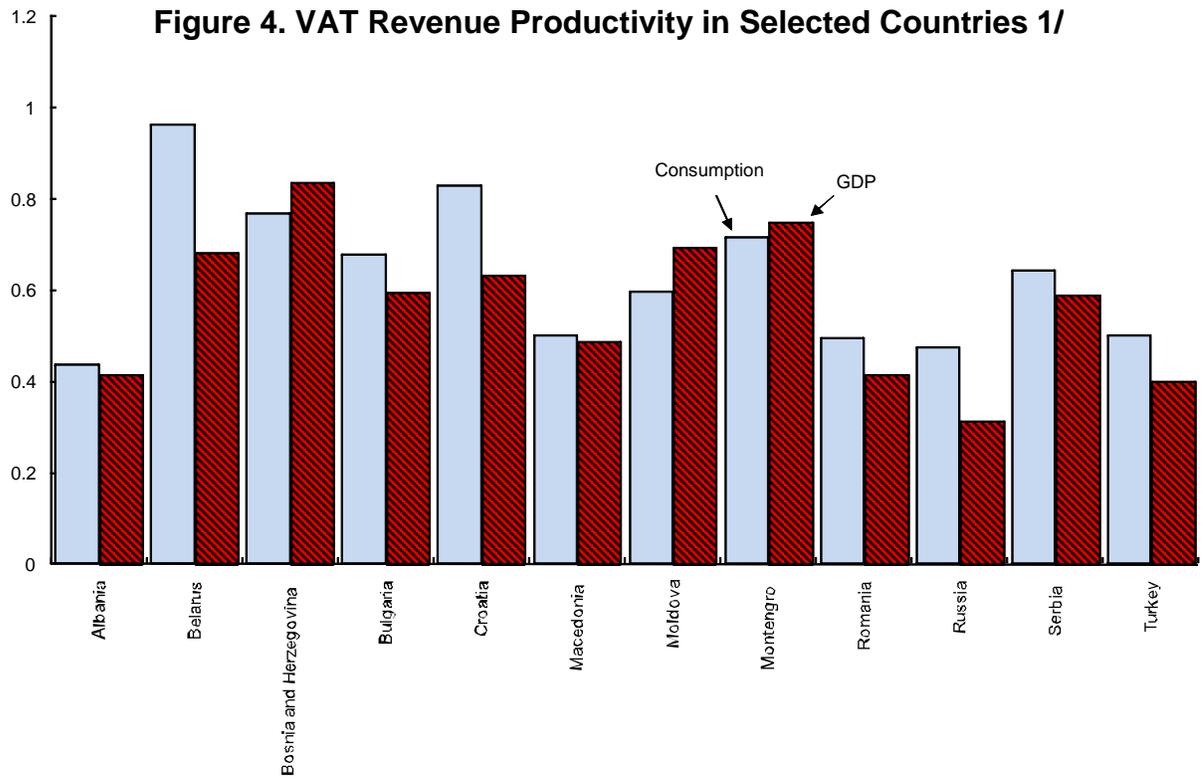
1/ Revenue productivity = Total VAT revenue as percentage of consumption or GDP, divided by the VAT standard rate.
Source: IMF staff calculation

Considering the still relatively high public debt, it is desirable to continue its reduction to a more comfortable levels. The worsening of global economic and financial conditions in recent years, and the challenges in meeting the government borrowing requirements, have underscored the necessity to strengthen public finance. Assuming a further gradual improvements in revenue collection, and with expenditure kept at around the present level of 30 percent of GDP (even allowing for a temporary increase as a result of large investment projects), fiscal deficit as percent of GDP could be brought down sizably, and in the medium-term, debt-to-GDP ratio would drop below 50 percent of GDP.

Before we turn to the discussion of possible numeral fiscal rules, next section puts some perspective on Albania's public debt, by comparing it with debt indicators in emerging market and low income countries.

### III. WHAT IS A SUSTAINABLE DEBT/GDP FOR ALBANIA?

Is Albania's public debt too high, and if yes, how much should it be reduced? Given the uncertainty surrounding the size of benefits and costs of taxation, there is no agreed theory of optimal public debt level. An argument has been advanced that if taxes are distortionary, zero debt could be desirable.[6] But this ignores the potential benefits of public spending financed from tax revenues. For practical policy purposes, the sustainability of public debt, rather than its optimal level is more relevant. However, uncertainty surrounds also the estimates of debt sustainability: there is a whole range of the debt-to-GDP ratios compatible with fiscal sustainability. A debt ratio of x percent of GDP could be sustainable in one state of the world, but unsustainable in another state characterized by large adverse shocks to growth, interest rate or exchange rate. Thus, what debt level is acceptable and compatible with fiscal sustainability is to some extent a matter of judgment and considerations of different trade offs.

Targeting a very low level of public debt over a short horizon when the starting level of debt is high would require a tighter fiscal stance for an extended period of time. This could entail costs such as lower public investment, missed high-return investment projects and reduced future potential output, slower improvement in development indicators etc. On the other hand, accepting a higher level of public debt carries the risk that adverse shocks (such as the output and tax revenue decline during the recent global financial crisis) would increse the costs of public borrowing, raise the debt-to-GDP ratio and trigger sustainability concerns.

Two approaches can be used to assess the public debt level. First, we look at how Albania's public debt level compares with that of other emerging market countries (EMCs) and

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[6] See Wyplosz, (2005).

Figure 5. Public Debt in Albania, Emerging Market and Low-income Countries (in % of GDP)
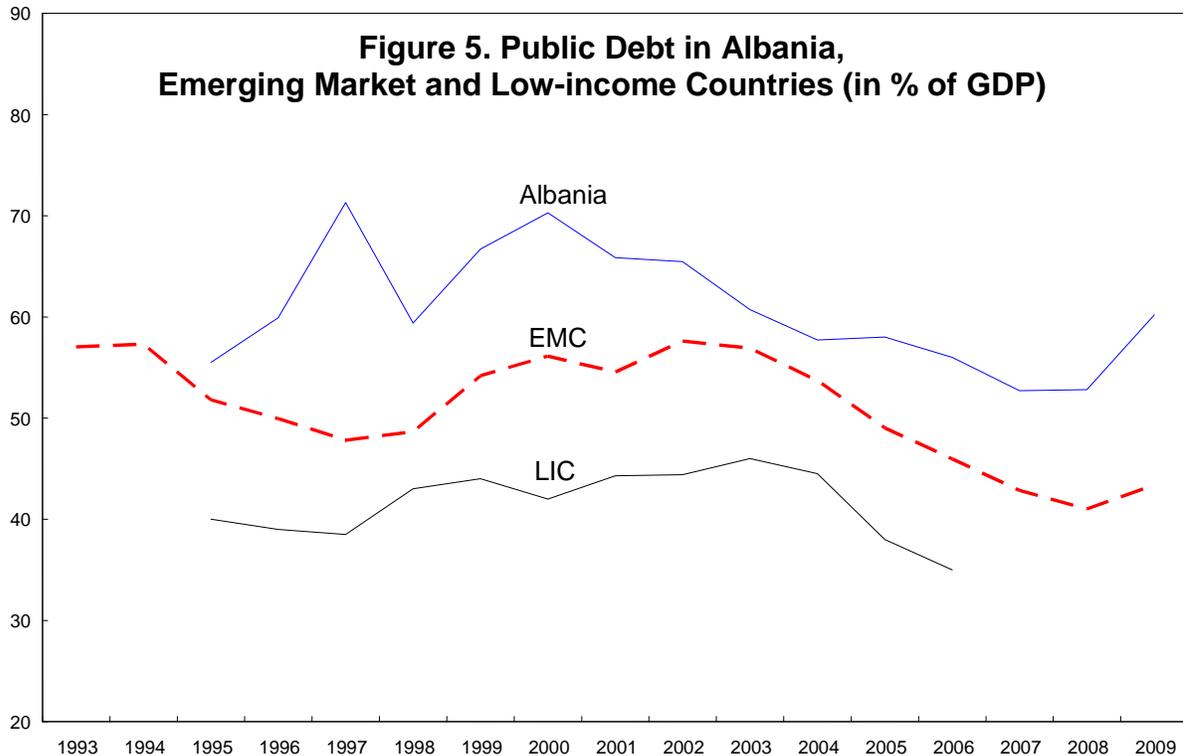
Source: Staff data; Ugo Panizza (2009)

low-income countries (LICs); second, we review what empirical literature has to say about public debt sustainability.Using the data on gross public debt in 49 EMCs, Figure 5 shows that since 1997, Albania's debt-to-GDP ratio never fell below the EMCs average. In addition, after having reached the peak in 2003, EMCs average debt ratio began to decline more rapidly than Albania's, and the difference began to widen again. Comparison with individual EMCs (Figure 6) also shows that Albania's public debt in 2008 is on the high side: out of 49 EMCs in the sample, only 12 have the debt-to-GDP ratio higher than Albania. With the exception of Hungary, none of these 12 countries is a former centrally planned economy. It could be argued that given Albania's relatively low level of income and potential vulnerability to adverse shocks, its debt ratio should not be higher than the EMCs average, which for 2008 would mean not higher than 41 percent (or 34.2 percent using the median). As Albania has only recently graduated from the low-income country status, we also compare Albania's public debt to that of the low income countries (lower line in Figure 5). Using this benchmark, Albania's public debt is even higher than when compared to the EMCs, adding further weight to the conclusion that its reduction would be desirable.

Empirical studies of debt sustainability could provide a further guidance in assessing Albania's public debt. IMF (2003) undertook a detailed study of public debt sustainability in the EMCs, looking at what level of public debt the EMCs defaulted, and how fiscal policy responded to different public debt levels. The results show that while the level of public debt

**Figure 6. Public Debt in Albania
and Individual Emerging Market Countries (in % of GDP)**
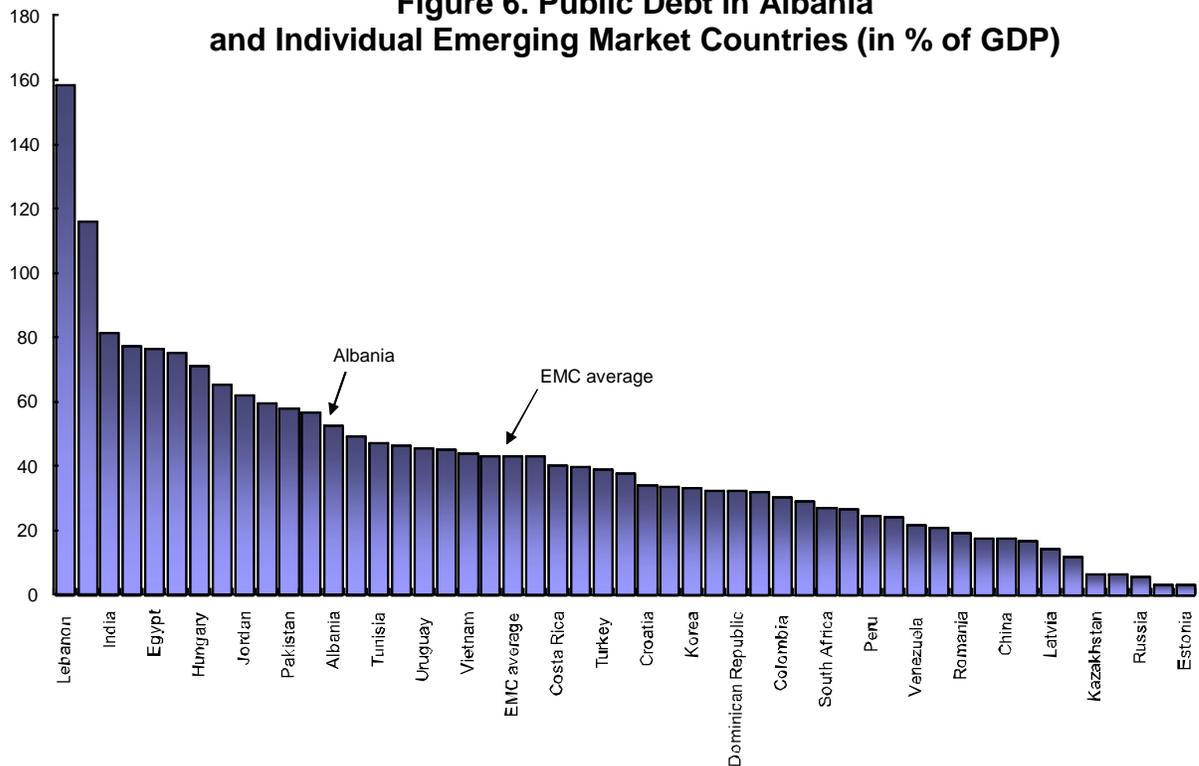
Source: SPR - Economic and Financial Indicators for EMCs, April 2009

at the time of default varied significantly, in some cases, it was surprisingly low. In 55 percent of the defaults analyzed, public debt was below the Maastricht benchmark of 60 percent of GDP, and in 35 percent of cases, it was less than 40 percent of GDP. Almost half of the default cases occurred in countries with debt ratios at or below that of Albania. Again, this result raises a warning flag about the level of Albania's public debt.

The warning is also raised using other approaches to debt sustainability analysis. One such approach looks at how has the primary fiscal balance responded to different levels of public debt. To ensure solvency, primary balance should be stronger in countries with higher debt, or should strengthen in a given country as its debt ratio increases. The main finding in the IMF (2003) is that as debt levels increase, the response of the primary balance weakens (surpluses increase less than proportionally to debt increase), and stops completely when debt reaches about 50 percent of GDP. This points to the conclusion that, on average, fiscal policy in the EMCs ceases to be consistent with debt sustainability once the debt-to-GDP ratio reaches 50 percent.[7]

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[7] Interestingly, IMF (2003) also found that in advanced economies, the response of primary surplus increases with the debt-to-GDP ratio.
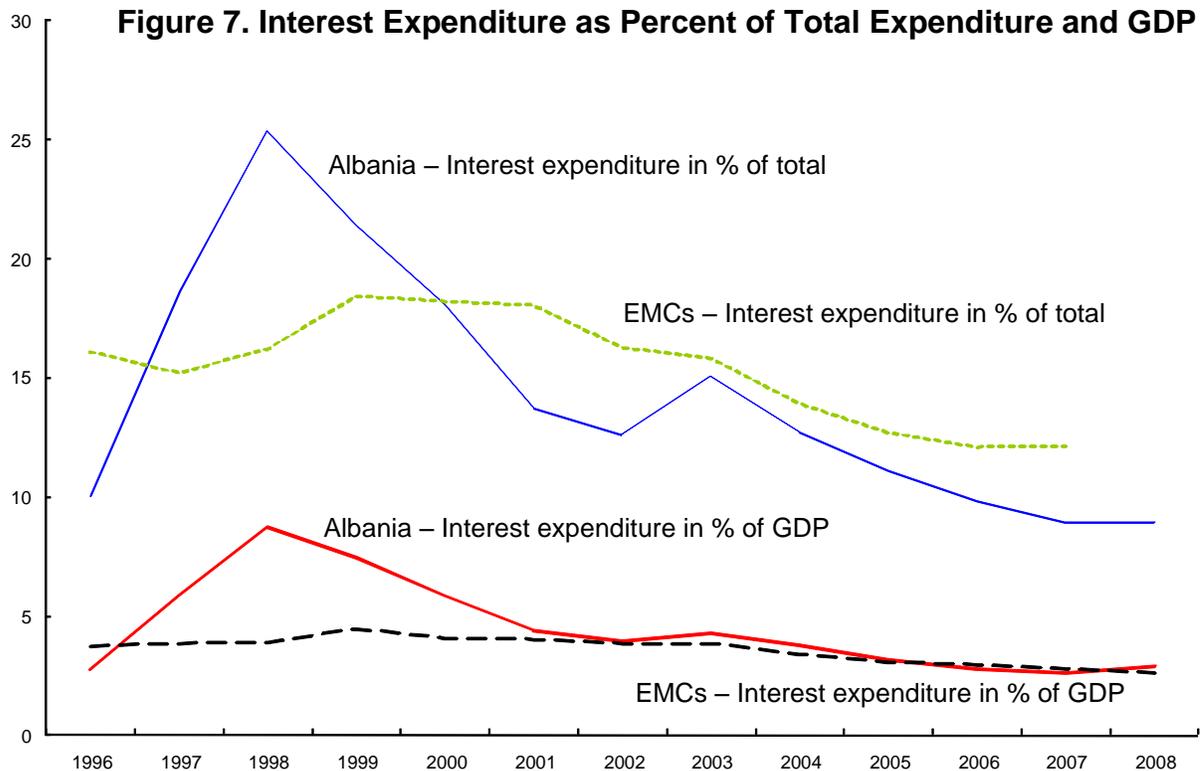
Finally, what level of public debt would be sustainable given the past record of fiscal policy? Average primary balance in the past can be used as an estimator of the expected future fiscal policy stance. For Albania, taking the average primary balance for 2000–08 (-1.6 percent of GDP) and applying it to the debt sustainability analysis shows that the debt ratio would gradually increase to close to 60 percent, and even more under adverse shocks. Despite improvements noted in Section II, past fiscal performance measured by the primary balance is not strong enough to stabilize or reduce the public debt ratio.

When using the results about debt sustainability in the EMC to provide a guidance about the appropriate level of Albania's public debt, it is important to understand what drives the relatively low debt tolerance in the EMCs, and to what extent these factors apply to Albania. A number of factors reduce the sustainable level of public debt in the EMCs (IMF, 2003; Rogoff et al., 2003):

- Relatively low revenue ratio, though with considerable differences among the individual EMCs. Low revenue make it more difficult to service public debt, without undermining the provision of public goods and transfer payments. IMF (2003) calculates the EMCs average revenue ratio at 27 percent, very close to current Albania's revenue ratio.

- Higher revenue volatility, reflecting greater underlying macroeconomic volatility (terms of trades, capital flows, incomes etc.). According to IMF (2003), the volatility of revenue-to-GDP ratio, measured by coefficient of variation for a period 1990–2002, ranges from a low of 2–3 for Hungary and South Africa to a high over 30 for Nigeria and Costa Rica. For the period 1996-2008, Albania's coefficient of variation or revenue is 6.7, placing it roughly in the middle of the EMCs. However, when measured for the more recent period 2000–08, the coefficient of variation falls sharply to less than 1, reflecting improved macroeconomic stability.

- Interest costs in the EMCs account for a high proportion of overall spending, and also show a large volatility, reflecting volatile market conditions. On average, IMF (2003) calculates that interest costs account for 17 percent of government expenditure, and 5 percent of GDP.[8] Again, Albania is doing much better on this account. Figure 7 shows that interest spending represents less than 3 percent of GDP and about 10 percent of total expenditure, thanks to Albania's public borrowing mostly on concessional terms. But with increased resort to borrowing at market rates, for a given level of public debt, these indicators are likely to worsen.

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[8] However, comparing overall and primary deficits in the EMCs database of the Strategy and Policy Review Department shows much lower interest expenditure, below 3 percent of GDP in 2008 (see Figure 7). The FAD EMC database shows—for a smaller sample of the EMCs—a projected mean interest payment at 3.7 percent of GDP in 2007.

Figure 7. Interest Expenditure as Percent of Total Expenditure and GDP

Albania – Interest expenditure in % of total

EMCs – Interest expenditure in % of total

Albania – Interest expenditure in % of GDP

EMCs – Interest expenditure in % of GDP

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

Source: Staff calculations

- Sensitivity of public debt-to-GDP to changes in the exchange rate. With a large part of EMCs public debt denominated in foreign currency, depreciation could immediately and possibly significantly (depending on the size of foreing-currency debt and the extent of depreciation) increase the domestic currency value of the foreign currency-denominated debt. Moreover, currency depreciation often takes place in connection with other adverse shocks to output, exchange rate, or market confidence, which further worsens the adverse debt dynamics (Hausman, 2003). As in the EMCs, Albania's share of foreign currency denominated debt in total public debt has been declining steadily (Figure 8), from over 50 percent of total debt a decade ago to about 30 percent, less than the EMCs' average.

Overall, it appears that Albania's debt tolerance indicators are not worse than the EMCs' average. However, their robustness is not guaranteed in a more uncertain environment. First, while Albania's budget revenues have been relatively stable, this reflects the stable macroeconomic condition which are now being tested. Second, reflecting Albania's low income country status and past borrowing on concessional terms, the costs of servicing public debt have thus far been relatively low. But as illustrated by the high interest on the recent government borrowing from a consortium of banks, the costs could increase quickly. Third, while the share of foreign currency-denominated debt has been declining, access to global capital markets and limited domestic financing could reverse this trend.

Figure 8. Share of External Government Debt in Total Government Debt (in %)
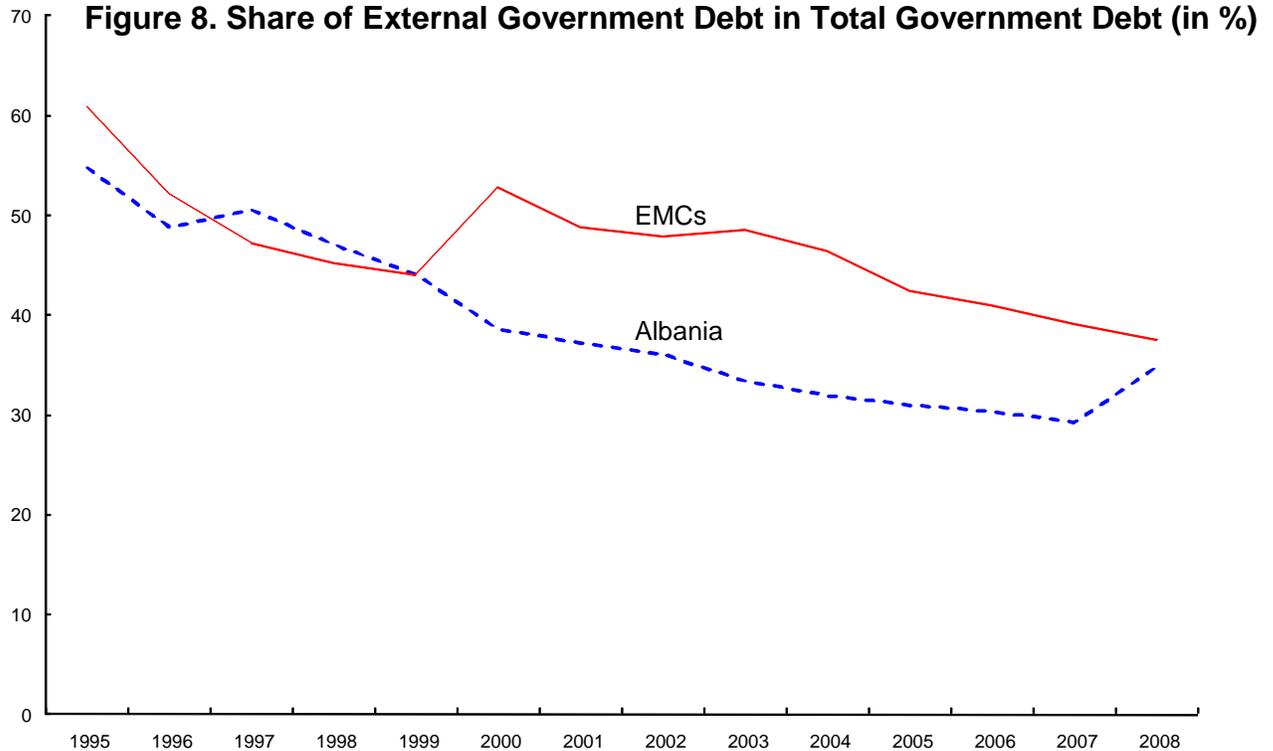
Source: SPR – Summary of Economic and Financial Indicators for EMCs, April 2009.

IV. OPTIONS FOR FISCAL RULE

This section discusses two alternative numerical fiscal rules—debt rule and expenditure rule—that could be considered. It provides illustrative calculations to show how these rules could be calibrated, and how following these rules would reduce the public debt ratio.

A. Debt Rule

As a country with a relatively low income, Albania faces a prospect of rapid growth during the period of catching up with the more advanced countries. If it materializes, the rapid growth of GDP could provide good opportunity to reduce over time significantly the debt ratio, without the need to resort to the reduction of nominal public debt. Like other countries in the past, Albania can –grow out" of its debt.[9]

A debt rule could be used to formalize this strategy. The conditions necessary for the debt ratio to fall is that, over time, the rate of increase in nominal value of public debt (in lek) is less than the rate of increase in nominal GDP:

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[9] For historical episodes of countries growing out of debt, see Macdonald (2003).

$$(\Delta D/D) = \alpha (\Delta Y/Y), \qquad \text{where} \quad 0 < \alpha < 1, \tag{1}$$

where D is nominal public debt measures in lek, Y nominal GDP and α is the coefficient determining how much should nominal debt grow in percentage terms relative to the growth of nominal GDP. Thus, α is a coefficient of ambitiousness of debt ratio reduction. If α would be equal to 1, debt ratio would not change. If α would be equal to zero, the stock of nominal debt would not change.[10]

To specify how such rule would work in practice, we first write down the equation describing the evolution of public debt:

$$D_{t+1} = [(1 + \varepsilon)(1 + r_f) DF_t] + (1 + r_d)DD_t - PB_{t+1} \qquad . \tag{2}$$

The stock of public debt at the end of the period $t+1$ is the sum of: (i) initial value in leks of the foreign currency-denominated part of public debt, DF_t, plus the change of that value during the period $t+1$, which captures the impact the foreign interest rate and exchange rate depreciation (ε measures the percentage currency depreciation: $\varepsilon = (e_{t+1} - e_t)/ e_t$; with e measured in number of leks per unit of foreign currency); (ii) initial value of the domestic debt, DD_t, plus interest payments on that debt, $r_d.DD_t$; and (iii) the negative of the primary budget balance in the period $t+1$, PB_{t+1}. The change in the stock of public debt during the period $t+1$, equals:

$$D_{t+1} - D_t = \Delta D_{t+1} = \varepsilon DF_t + r_f . DF_t + \varepsilon . r_f . DF_t + r_d . DD_t - PB_{t+1} \tag{3}$$

First step in establishing the debt rule would be to set the desired rate of increase in nominal debt, as a fraction of projected increase in nominal GDP, $(\Delta Y^p /Y^p)*$:

$$(\Delta D_{t+1}/D_t))* = \alpha (\Delta Y^p /Y^p)* \quad , \tag{4}$$

which we rearrange to

$$(\Delta D_{t+1})* = \alpha (\Delta Y^p /Y^p)* . D_t \tag{4}$$

The last term on the right-hand side of equation (3), primary balance, would be the operational target that would allow reaching the desired change in nominal debt. Thus, we combine (3) and (4)' and rearrange to get:

$$PB^*_{t+1} = -[\Delta D_{t+1}*] + [\varepsilon DF_t + r_f . DF_t + \varepsilon. r_f. DF_t] + [r_d . DD_t] \quad . \tag{5}$$

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[10] The rule does not allow for $\alpha > 1$. That is, targeted nominal debt cannot increase more than projected nominal GDP.

$$= -[\ \alpha\,(\varDelta Y^p/Y^p)^* . D_t] + [\ \varepsilon\,DF_t + r_f . DF_t + \varepsilon . r_f . DF_t] + [\ r_d . DD_t\ ]\ .$$

Given the assumed values of domestic and foreign interest rates and change in the currency exchange rate, the desired change in the nominal debt, $[\varDelta D_{t+1}^*]$, determines the required primary balance, PB^*_{t+1}. Setting the value of α would thus also determine, for a given values of interest rates and exchange rate, the value of the required primary balance (and thus overall balance, adding the interest payments). The lower is α, the smaller would be the targeted increase in nominal debt relative to the increase in nominal GDP, the stronger would be the required primary balance, and the faster would be—other things being equal—the reduction of the debt ratio. The choice of α reflect the ambitiousness of fiscal consolidation. The value of α need not be time-invariant: the speed of debt ratio reduction could be gradually reduced as debt ratio falls. For example, one option would be to increase the value of α as the debt ratio falls below certain thresholds, say, 50 percent and 40 percent of GDP.

How to set the projected GDP, and thus the change in nominal GDP, $\varDelta Y^p$? Making a systematic error in projecting the change in nominal GDP would likely result in systematic deviation of actual debt from desired debt path. A systematic overestimation of nominal GDP would produce a faster reduction in debt ratio, and vice versa. The concern is not a projection mistake related to cyclical fluctuations in nominal GDP, but rather a mistake related to longer-term growth potential. To avoid a perception that nominal GDP projection would be biased as a result of political consideration, an independent projection could be used to determine $\varDelta Y^p$. One option could be to use IMF's medium-term growth forecast.

Another issue is how to project the interest payments on domestic and foreign currency debt? Thus far, Albania's costs of servicing domestic debt have significantly exceeded the costs of foreign currency debt, reflecting the important role of the concessional borrowing in the latter. However, as evidenced by the rather high costs of the recent syndicated loan, non-concessional borrowing in foreign currency is likely to be significantly more expensive than past concessional borrowing.[11] This suggests the likelihood of higher future effective interest rate (stock of foreign currency debt divided by foreign debt interest payments). As for the costs of borrowing domestically in lek, while these have been rather elevated recently, it could be premature to project a rapid decline in the effective interest rate on domestic debt (stock of domestic debt divided by domestic debt interest payments). These considerations should guide the assumptions about r_d and r_f when setting up the desired primary balance.

Finally, what assumption should be made about exchange rate movement and thus $\varepsilon.DF_t$? In the process of catching up, it could be expected that Albania's currency will tend to appreciate against the euro and U.S. dollar. Over the shorter time horizon, currency

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[11] The five-year 200 million euro syndicated loan contracted in 2009 came at the cost of Euribor plus 900 points.

movements are more uncertain, and it would appear imprudent when setting the desired primary balance to rely on currency appreciation to help bring the lek value of public debt down to the targeted level. A reasonably prudent assumption would be to assume a constant value of the exchange rate.

A potentially important benefit of the debt rule is that it would provide cyclical flexibility. A projected cyclical slowdown in nominal GDP growth would not require a correspondingly lower targeted increase in nominal debt (stronger primary balance), which would still be guided by potential output growth. Thus, a pro-cyclical fiscal tightening would be avoided and automatic stabilizers allowed to work. In the same vein, ex post deviation of actual GDP growth from potential growth would not trigger an ex post adjustment of debt target. Of course, in times of lower nominal GDP growth compared to the assumed potential growth, the decline in the debt ratio would be slower (or could even be temporary reversed), while the opposite would be the case in times a faster than potential growth (Figure 9). Assuming symmetrical GDP fluctuations around the trend, these temporary deviations should cancel each other out.

Whether the potential flexibility of the debt rule could be actually realized would depend on the credibility of the rule and on market expectations of public finance sustainability. In principle, the rule provides a scope for a slower debt ratio reduction and a weaker primary balance in case of a cyclical downturn. But the extent to which this room could actually be utilized would depend on the availability and costs of financing.

The primary balance is likely to be affected by cyclical fluctuations as well. This means that even if nominal debt is allowed to increase by a certain fraction of the potential GDP growth, rather than a fraction of the lower actual growth, the operation of automatic stabilizers may still need to be to some extent constrained, which would imply a pro-cyclical fiscal tightening. To allow the full operation of automatic stabilizers, primary balance would have to fluctuate with cyclical conditions: when actual growth falls below potential, primary balance would be allowed to weaken, and vice versa. Thus, ex post, in times of lower-than-potential growth, the coefficient α would effectively increase as a result of the weaker primary balance. Therefore, both lower-than-projected nominal GDP, and higher α, would contribute to a slower decline in the debt ratio. The ex post variation in α would permit a full operation of automatic stabilizers—a desirable feature of fiscal policy, absent sustainability concerns and deficit funding constraints. To maintain the debt ratio on a targeted declining path over time, this mechanism would have to work in reverse as well, with stronger primary balance and lower coefficient α when nominal GDP growth would exceed the potential growth. In that case, the decline in the debt ratio would accelerate. One potential problem is that as a result of the above-noted data limitations and difficulties in estimating the output gap and the corresponding revenue and expenditure elasticities, it could be difficult to tell apart cyclically-related and structural fluctuations in primary balance.

Figure 9. Cyclical Fluctuations and Debt Path

Debt Ratio

Nominal GDP Growth
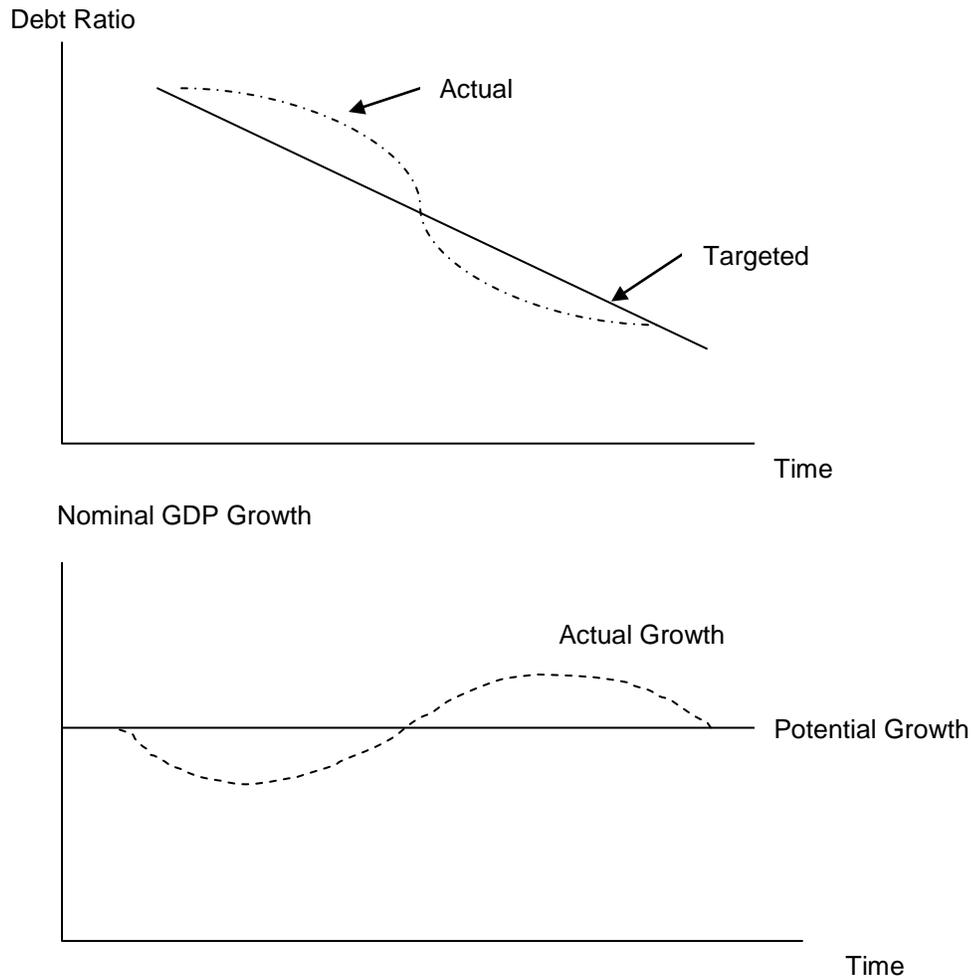
What about the ex post adjustment to the deviation of actual primary balance and actual debt increase from the target for other than above-discussed reasons? As long as (i) these deviations are the result of cyclical developments or temporary shocks; (ii) the projected potential output growth does not deviate systematically from actual growth; and (iii) the costs of borrowing are not persistently higher and currency weaker than assumed under the rule, deviations of actual debt from targeted path should be temporary and self-reversing. However, if there is reason to assume that the deviations reflect a more permanent forces, such as structural fiscal weakness or a significant deviation in interest an exchange rate developments, re-calibration of the parameters of the rule would be required, to bring the debt ratio back to the desired path. For example, regarding the assumption about medium-term growth used in setting the debt target, this could be revised at pre-determined intervals.

Similarly, a mechanism can be designed to capture the changes in the costs of borrowing or exchange rate relative to the assumptions outlined above. [12]

Figure 10 illustrates the primary balance that may be required under the debt rule for three different values of the adjustment coefficient α, namely: 0.5, 0.8, and 1. We assume that the effective interest rate on domestic currency debt will remain at the 2009 level (8.8 percent) and that effective interest rate on foreign currency denominated debt will increase from 2.3 percent in 2009 to 7 percent in 2015. The nominal exchange rate of lek remains stable, but we also show a scenario where the lek would depreciate. The figure illustrates clearly the large sensitivity of the required primary balance to the choice of α: a more ambitious reduction of the debt ratio (with α = 0.5) would require a significantly stronger primary balance (by over 5 percent of 2009 GDP compared to the projected 2009 primary balance— though the underlying 2009 fiscal position is stronger and fiscal effort needed to achieve this adjustment lesser; see below). In contrast, a less ambitious debt reduction, with α = 0.8, could be compatible with a broadly zero primary balance. Keeping the adjustment coefficient at α = 1, which means allowing the same proportional increase in nominal GDP and debt, and thus keeping the debt ration stable, would be compatible with a primary deficit about 1 percent of GDP. [13] The implication of the exchange rate depreciation is illustrated by the exchange rate shock applied to the case of α = 1: a sustained annual depreciation by 5 percent would require about 1 percentage point of GDP stronger primary balance, to offset adverse impact of a weaker currency on the lek value of foreign currency-denominated debt.

Figure 11 shows the evolution of the debt-to-GDP ratio under these scenarios. Obviously, with α = 1, nominal debt would grow in line with nominal GDP, and the debt ratio would remain constant. The figure illustrates that to achieve a tangible reduction in the debt ratio, a coefficient of adjustment significantly less than 1 and—absent sustained currency appreciation or lower interest rates—a correspondingly strong primary balance would be needed.

Given the starting fiscal position, how significantly would the underlying fiscal balance have to adjust to achieve a visible reduction in debt ratio? Or, to put it differently, what would be the cyclically neutral value of α? To answer this question, we need to estimate the cyclically neutral fiscal balance, that is, fiscal balance when the GDP was close to its potential, and also

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[12] IMF (2009) discusses the response of fiscal rules to different shocks.

[13] The sharp spike in the 2010 primary balance compared to the projected 2009 outcome is caused by the fact that the transition to the primary balance required to achieve the desired debt ratio path happens in one year. Primary balance in 2009 was particularly weak, resulting in a nominal public debt increase double the increase in nominal GDP.

**Figure 10. Required Primary Balance under Debt Rule (in % of GDP)**
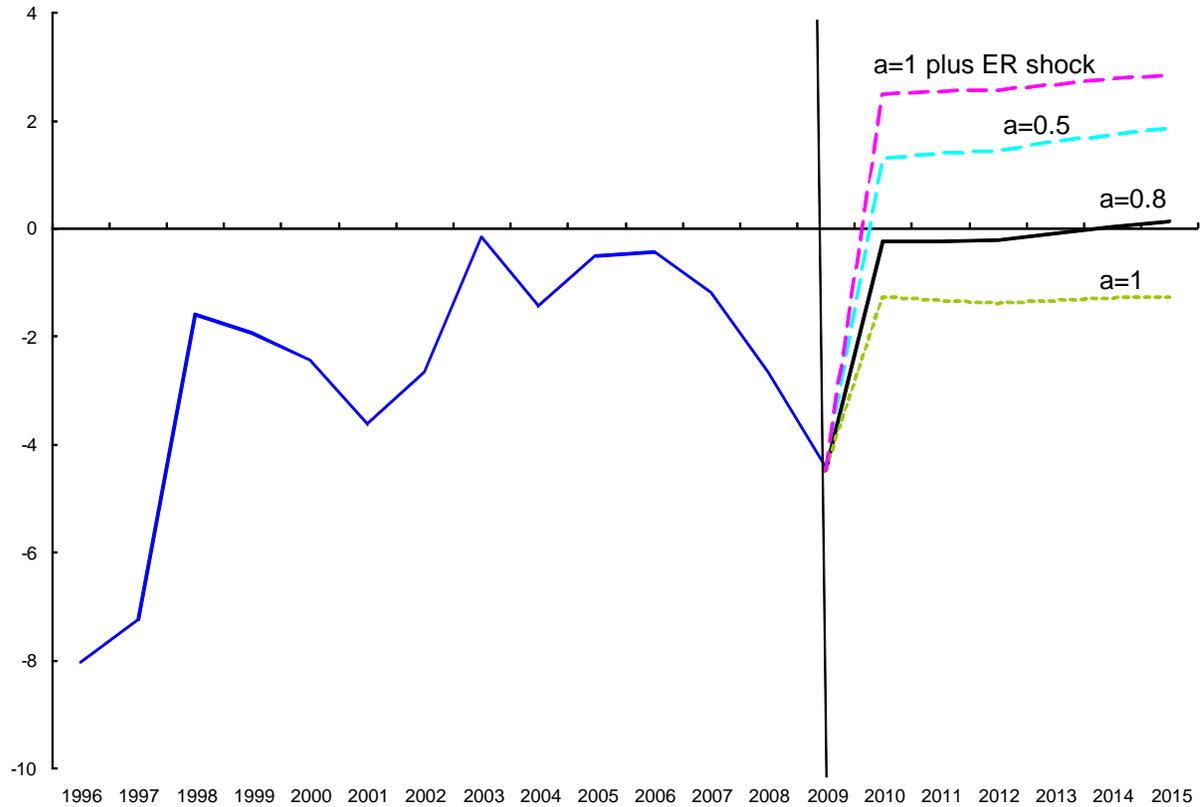
account for the one-time factors affecting fiscal balance. On the expenditure side, we use the 2006 expenditure-to-GDP ratio of 28.6 percent, before the large road investment project began. For revenue, we take the 2008 ratio of 26.9 percent (before the crisis hit and growth slowed down), and we deduct 1 point of GDP to reflect estimated revenue losses due to 2009 cuts in social security contribution rate, getting a ratio of 25.9 percent of GDP. Thus, overall underlying deficit would be about 3 percent of GDP, and with interest payments close to 3 percent of GDP as well, we get a broadly zero underlying primary balance. From (5), we can then calculate the value of ΔD_{t+1}^* (given the assumptions about $r_f . DF_t$ and $r_d . DD_t$).

$$0 = -[\Delta D_{t+1}^*] + [0 + 34.6 + 6] + [0] \rightarrow [\Delta D_{t+1}^*] = 40.6$$

Then, using (4), given the assumed potential nominal output growth of 9 percent and the stock of public debt 685 billion lek, we calculate the value of α.:

$$40.6 = \alpha (0.09)*685 \rightarrow \alpha \approx 0.66$$

**Figure 11. Public Debt Ratio under the Debt Rule,
Different Adjustment Coefficients (in % of GDP**
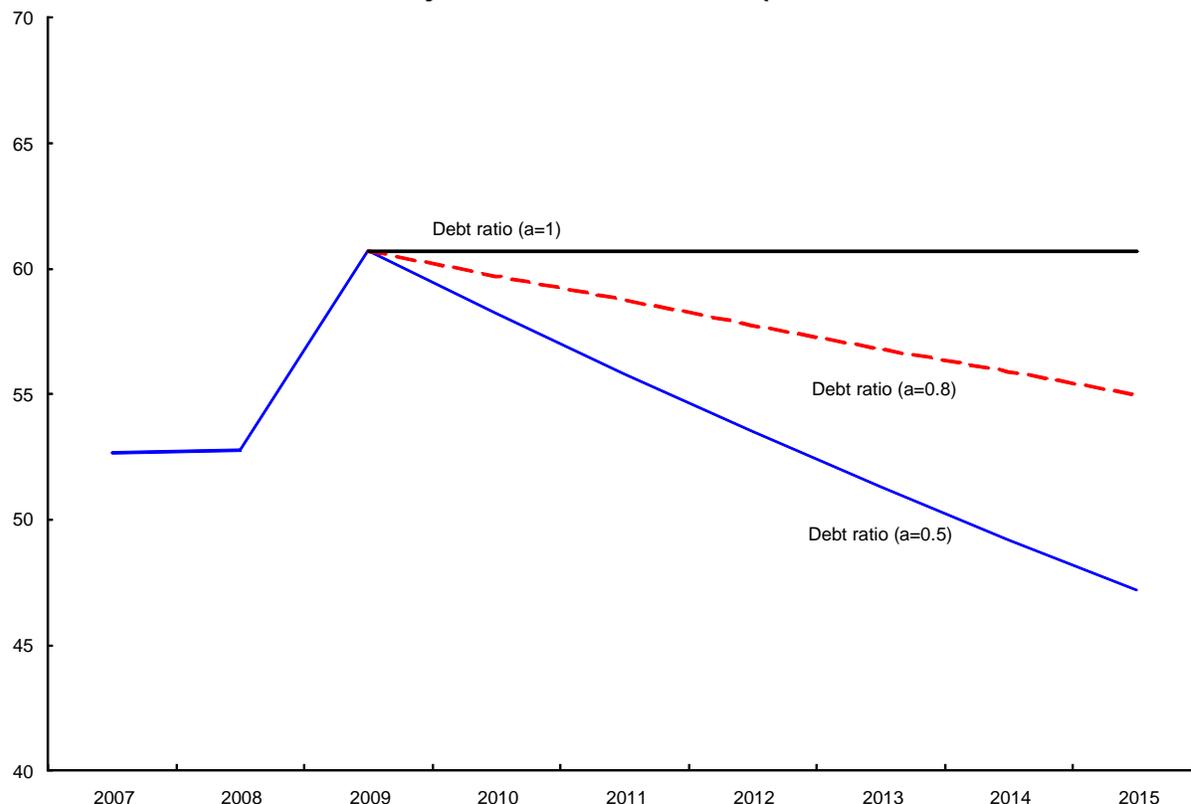
Thus, given the assumptions, an adjustment coefficient $\alpha = 0.66$ would broadly correspond to cyclically neutral fiscal stance. A coefficient less than 0.66 would call for a further fiscal effort to strengthen the underlying fiscal balance, while a coefficient larger than 0.66 would allow some cyclical easing of the underlying fiscal balance.[14] If the underlying primary position would be a deficit of 10 billion lek rather than balance, the value of coefficient α corresponding to cyclically neutral fiscal stance would increase to 0.82. As can be deducted from Figure 11, this would produce only a very slow reduction in the debt ratio, slightly less than the path with $\alpha = 0.8$.

Since 2006, there has been some increase in the current spending-to-GDP ratio, particularly in 2009, and even removing the impact of the road investment (3 percent of GDP in 2009) could leave the underlying primary balance weaker than zero. This suggests that, at minimum, a moderate strengthening of the underlying primary fiscal balance would be required to achieve a visible reduction in the debt ratio over the medium-term. For example,

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[14] Note the important assumption about the ―underlying‖ size of capital spending, that is, excluding the road project. In 2006, before that project started, capital spending was 5.6 percent of GDP, almost 3 points less than in 2008.

if the authorities would like to reduce the debt ratio with a speed corresponding to $\alpha = 0.5$ in the figure above, then the underlying primary balance would have to improve at least by 1 to 1.5 points of GDP, and even more if the starting underlying primary balance would be weaker than zero.

B. Expenditure Rule

Another option for Albania would be the expenditure rule, with a correction mechanism to guide against slippages on the revenue side. The correction mechanism is considered to be an important safeguard of the expenditure rule, because on its own, such rule may not suffice to ensure low deficit and declining debt ratio. There are several options how to set the targeted expenditure growth. Taking into account that the current level of public expenditure is seen by the authorities as broadly appropriate, the rule could aim to maintain, over time, the expenditure ratio to GDP constant, while allowing short-term cyclical fluctuations. As in the case of the debt rule, potential GDP growth could be used to calibrate the desired expenditure growth, ΔG^*:

$$(\Delta G/G)^* = (\Delta Y^p / Y^p) \tag{5}$$

Again, medium-term growth projection by the IMF or other independent agency could be used to set the potential GDP growth.

Like the debt rule, the expenditure rule would provide a significant degree of fiscal policy flexibility in response to cyclical output fluctuations. First, it would allow a full operation of automatic stabilizers on the revenue side. Given Albania's still limited social safety net, revenue automatic stabilizers are the more important than expenditure automatic stabilizers. Second, the rule would allow expenditure growth to remain unaffected by cyclical output fluctuations. Because automatic stabilizers on the expenditure side are rather small, this should not produce significant further cyclical swings of fiscal balance, beyond that resulting from cyclical fluctuations of revenue.

One well-known shortcoming of the expenditure rule is that it does not cover the revenue side of the budget, and thus does not tie down the budget balance and debt dynamics. Slippages on the revenue side (or increased tax expenditures) could weaken fiscal stance even if the expenditure limits are strictly observed. One solution to this weakness, often used in countries with the expenditure rule, is to reinforce it with a mechanism that would require corrective measures if revenue collection weakens for other than cyclical reasons.[15]

How would the fiscal balance and debt evolve under the proposed expenditure rule? To illustrate this, we need to make some assumptions about the future revenue path. To this end,

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[15] See Danninger, 2002, for a discussion of the debt correction mechanism in Switzerland.

we use three different scenarios of tax elasticity, together with the projection of nominal GDP. In recent years, tax elasticity has been exceeding one with a significant margin (hovering around 1.4), reflecting the positive impact of improvements in revenue administration on tax collection.[16] Looking ahead, we consider three scenarios: (i) tax elasticity gradually declines to 1; (ii) tax elasticity declines but remains above 1; and (iii) tax elasticity falls below 1. Figure 12 shows the evolution of revenue ratio under these scenarios.[17] In the first scenario, as tax elasticity gradually declines toward 1, the revenue-to-GDP ratio stabilizes initially increases and then stabilizes. With elasticity staying above 1, the revenue ratio continues to increase, though at a declining rate. Finally, with the revenue elasticity falling below 1, the revenue ratio eventually starts falling as well.

How would the overall fiscal balance behave under the expenditure rule and different assumptions about revenue elasticity? We assume that starting in 2010; the rate of growth of nominal expenditure would be in line with potential nominal GDP growth (approximated by the IMF medium-term growth projection). In addition, we deduct 35 billion lek from 2010 expenditure, to account for the temporary spike in capital spending that is assumed to come to the end by 2010. Figure 13 shows the fiscal balance in percent of GDP, given this expenditure growth and the alternative revenue elasticity assumptions. The assumed decline in capital spending, together with buoyant revenues, result in a sharp improvement in fiscal balance in 2010. Under both first and second elasticity assumptions, fiscal deficit continues to decline from the projected peak 2009 level. But in the case of revenue elasticity falling below 1, the fiscal deficit begins to widen again.

Under the expenditure rule, fiscal balance would also be sensitive to deviations of actual growth from the potential growth used to calculate the nominal expenditure growth. Even with the nominal expenditure growth on target, fiscal balance, as a percent of GDP, could be weaker because of: (i) smaller-than projected growth in nominal GDP, and thus an increase in expenditure-to-GDP ratio; and (ii) weaker revenue collection. Figure 14 illustrates the evolution of fiscal balance in percent of GDP under the above-discussed revenue elasticity assumptions, with the additional assumption that the actual GDP growth would be one standard deviation less than GDP growth used to set the expenditure growth. All three scenarios generate a weaker fiscal balance compared to the baseline growth. But fiscal deficit begins to widen again not only in the third case when the revenue elasticity falls below 1, but eventually also marginally in the case where elasticity converges to 1. This demonstrates the importance of anchoring the expenditure rule with a corrective mechanism that would

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[16] With the most serious weaknesses in tax administration now addressed, the scope for further gains in revenue collection as a result of tax administration reforms inevitably diminishes.

[17] Elasticity of tax revenue is $e = dT/dY * Y/T$. Given the assumed value of elasticity, $e = ê$, projected percentage increase in revenues is equal to is $ê * dY/Y$.

Figure 12. Revenue Projection for Different Elasticity Assumptions, 2010-2015 (in % of GDP)
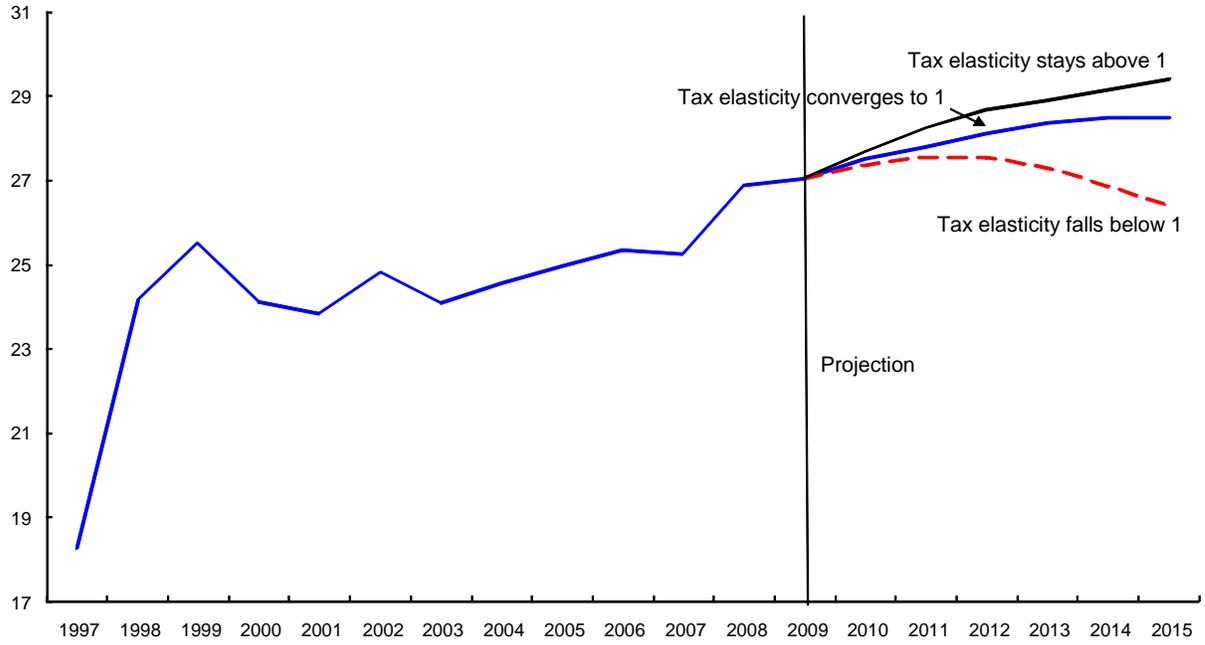
Figure 13. Overall Budget Balance under Expenditure Rule, Alternative Revenue Elasticity Assumptions (in % of GDP)
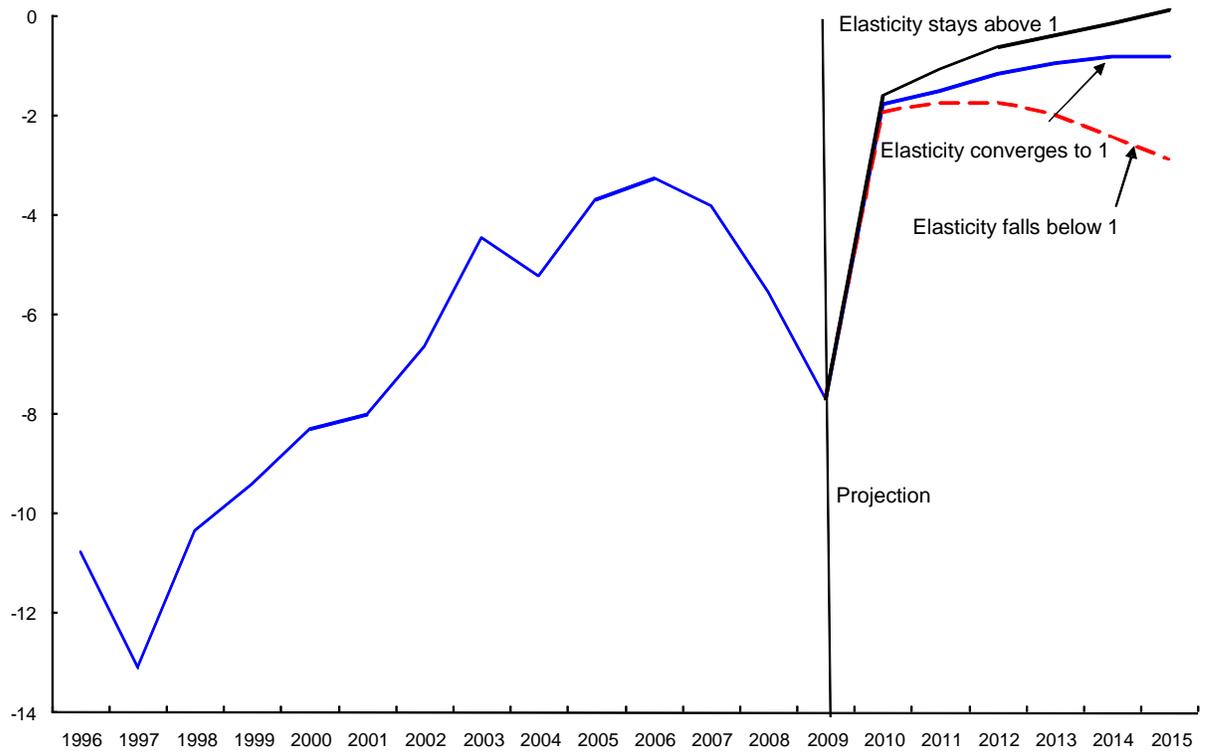
Figure 14. Overall Balance, Alternative Elasticity Assumptions with Lower Growth Scenario (in % of GDP)

Elasticity above 1

Elasticity converges to 1

Elasticity falls below 1

Projection
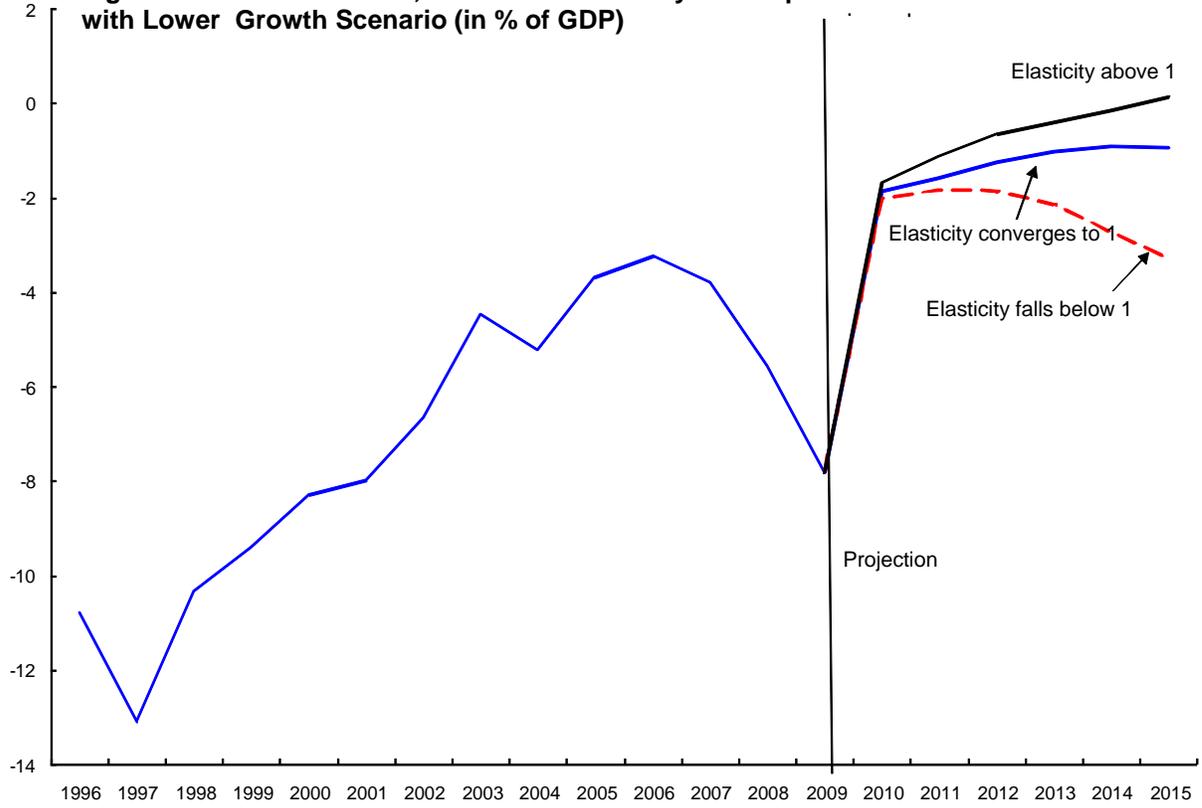
Figure 15. Public Debt under Different Revenue Elasticities (in % of GDP)

Elasticity falls below 1

Elasticity converges to 1

Projection

Elasticity remains above 1
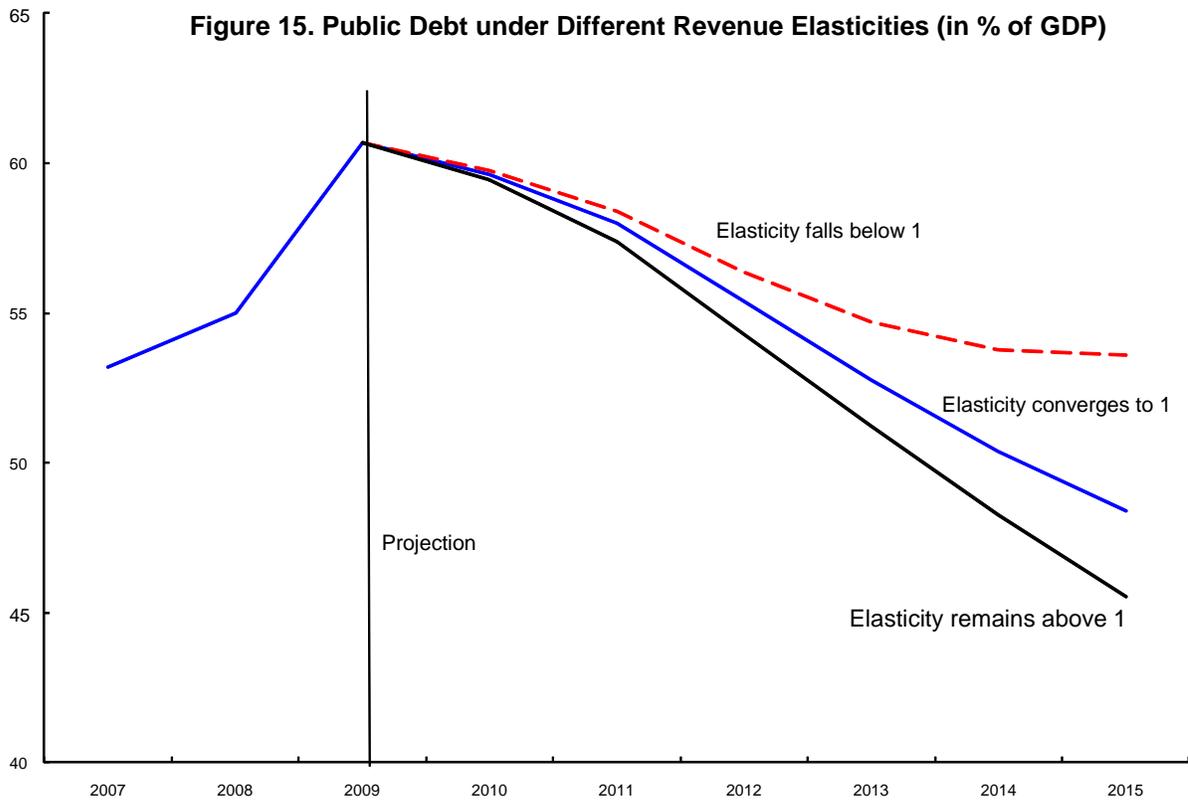
prevent a sustained deviation of growth and/or revenue collection from the assumed path to undermine fiscal position.

Finally, we look at how the debt-to-GDP ratio would behave under the expenditure rule, and under the different assumptions about revenue elasticity (Figure 15). We are assuming no change in the nominal exchange rate of lek, and thus no change in the lek value of the foreign currency-denominated public debt resulting from currency movements. We use the same assumptions about domestic and foreign interest rates as in the section on the debt rule. Under all three elasticity assumptions, the debt-to-GDP ratio declines from the peak of over 60 percent in 2009. However, with revenue elasticity falling below 1, the decline eventually stops and debt ratio stays above 50 percent. In contrast, with elasticity staying above one or converging to one, the projected debt ratio falls by 2015 below 50 percent of GDP.

As in the case of the debt rule, the expenditure rule's objective would be to reduce the debt-to-GDP ratio. The expenditure rule needs to be complemented by a mechanism that would trigger corrective measures if the actual path of debt ratio would deviate from the targeted path. However, unlike the debt rule which specifies the primary balance consistent with the targeted debt ratio, in the case of the expenditure rule, primary and overall balances are not specified. Both balances depend importantly on the revenue collection which is not covered by the rule. This potential problem could be mitigated by complementing the expenditure rule with a targeted reduction in the debt ratio (how much and how fast, given the assumption about revenue elasticities). If at a certain point in the future, say in five years from the launch of the rule, the debt ratio would not fall to the targeted level, corrective measures would be required, such as reducing the expenditure growth to $\beta*(\Delta Y^p/ Y^p)$, where $0 < \beta < 1$.[18]

As discussed in Section III, Albania's debt ratio is on the high side and its reduction would appear appropriate, possibly below 50 percent in the medium-term. Under the expenditure rule, once the decision is made about the determination in spending increase, the main policy tool to change the dynamics of the debt ratio is tax policy and tax administration measures that would change tax elasticity and tax buoyancy. As illustrated above, the expenditure growth in line with potential output growth would be consistent with a reduction in debt ratio only if tax elasticity (and buoyancy) remains above one. Specifically, revenue elasticity declining from 1.3 in 2010 to 1 in 2015 would bring the debt ratio to below 50 percent (assuming the absence of adverse shock to debt ratio from adverse interest rate or exchange rate movements). This would likely require further improvements in tax administration, but also to avoid more tax cuts.

An important aspect of the design of expenditure rules is the coverage. Should certain expenditure items be excluded from the rule limits? A case could be made for excluding

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[18] If the deviation of debt ratio would be moderate, and/or if it would be the result of cyclical weakening of growth, corrective measures would not be required.

items that are more difficult to control or volatile, or that government wants to protect against cuts. On the other hand, fiscal sustainability perspective points to the desirability of comprehensiveness. A more comprehensive expenditure coverage is more likely to ensure effective control of total expenditure. If public debt is high and fiscal sustainability an important concern, the expenditure rule should be more comprehensive. The European Commission (2006) finds that increased coverage in the expenditure rule leads to lower primary expenditure-to-GDP ratio. A comprehensive coverage makes the target also more transparent, and thus easier to monitor and enforce.

In case of Albania, the prominence of the fiscal sustainability concern, relatively small size of expenditure automatic stabilizers, and the importance of strict expenditure control in ensuring fiscal sustainability, speak in favor of a more comprehensive target.

- *Current vs. capital expenditure.* The customary concern is that capital expenditure are politically easier to cut than current expenditure, and that including them in the expenditure rule could result in their undesirable cutbacks. Targeting only current expenditure would avoid such risk. But the disadvantage of excluding capital expenditure would be a further weakening of the link between the targeted variable and the ultimate objective of fiscal sustainability. Even abstracting from the recent spike, capital expenditure represent about one-fifth of Albania's total expenditure, and are likely to remain a substantial part of government expenditure for some time. Excluding capital expenditure would weaken the expenditure rule's efficacy.[19]

- *Interest payments.* Some countries with the expenditure rule exclude interest payments. Interest rate volatility could be large in the EMCs, and it could therefore be desirable to exclude interest payments from the expenditure target, to avoid large fluctuations of primary expenditure. In addition, Ljungman (2008) notes that interest expenditure reflect past history of fiscal policy, and that given the relatively short budgeting time horizon, policy decisions' implications for future interest payments are unlikely to figure prominently. On the other side, as Mills and Quinet (2001) remind, if the objective of the expenditure rule is to ensure the compatibility of the public debt and tax burden, interest payments should be included.[20] In Albania,

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[19] Problems with poor contract design and costs overrun in some large investment projects suggest that such projects could pose fiscal risks, and further strengthens the case of inclusion of capital spending in the expenditure rule.

[20] This assumes that higher non-interest spending permitted by a temporary decline in interest payments would be reversed once cyclical conditions tighten. More generally, if a volatile spending item is subject to symmetric shocks that cancel each other over time, it could be excluded from the expenditure ceiling. Total expenditure and deficit would increase (decrease) during cyclical expansion (contraction). This assumes no constraint on financing the temporary higher deficit. But if the spending item remains elevated for some time, and risks bringing the deficit to difficult-to-finance level, an offsetting reduction of other expenditure would be warranted. Targeting total expenditure would mean that government uses its control over discretionary spending to respond to shock to interest payments and other cyclically sensitive items, and to mandatory expenditure, to keep the overall expenditure on target.

interest payments have reached the peak of close to 9 percent of GDP during the turmoil in late 1990s, but their size and volatility have been on the decline since. But being still above 3 percent of GDP, they remain important for fiscal sustainability, while their relative stability reduces the concern about excessive volatility of primary spending. On balance, there is a case for their inclusion in the expenditure target.

- *Cyclically sensitive expenditure.* In theory, including cyclically sensitive expenditure in the expenditure rule could weaken fiscal policy as a countecyclical tool, as governments may be forced to offset the increase in these expenditure as a result of cyclical slowdown by cutting other spending, thus limiting the operation of automatic stabilizers on the expenditure side. However, automatic stabilizers are typically much more important on the revenue side (three-fourths of stabilization or more, according to Ljungman, 2008). In Albania, with relatively underdeveloped social safety net, cyclically sensitive expenditure are probably even smaller, which allays the concern that their inclusion in the expenditure rule would weaken the countercyclicality of fiscal policy.

V. Conclusion

As Albania graduates from the Fund-supported programs, and considers to eventually access international capital market to finance part of government borrowing needs, it becomes more important to put in place a robust fiscal policy framework that would strengthen fiscal discipline and fiscal credibility. This paper argues that a numerical fiscal rule could play a helpful role in achieving these objectives. Albania's public debt is still relatively high and needs to be brought down. Debt reduction would require stronger primary fiscal balances in the future than has been the norm in the past. By allowing the authorities to spell out their fiscal policy objective and the means of achieving it, a numerical fiscal rule would open fiscal policy conduct to increased public scrutiny, and make politicians more accountable for achieving these objectives.

The paper discusses two alternative fiscal rules, without stating a clear preference. One option would be to introduce the debt rule, where the rate of public debt growth would be set as a fraction of nominal GDP growth. Albania's expected rapid nominal GDP growth during the catching up would allow to reduce the debt ratio relatively rapidly even in the absence of reduction of the nominal stock of public debt. Using the asusmptions about interest rates and exchange rate in the period for which the target would be set, the primary balance would be derived consistent with achieving the targeted reduction in the debt ratio. The primary balance would serve as the operational target. To avoid undesirable expenditure fluctuation, the debt rule would be set with respect to the potential output growth, thus allowing room for the operation of automatic stabilizers.

An alternative option considered is the expenditure rule. This rule would impose a limit on the nominal growth of total expenditure. If the objective would be to maintain the present

level of expenditure as a percent of GDP, their rate of growth could be set equal to projected nominal potential output growth, which would avoid the cyclically-induced expenditure fluctuations. Independent medium-term growth projection could be taken as a proxy for potential GDP growth. A well-known shortcoming of the expenditure rule is that it does not cover revenue, which could weaken its link to fiscal sustainability. Focusing exclusively on expenditure policy could weaken revenue policy, and lead to problems with tax administration and compliance, and possibly even to populist tax cuts.[21] Thus, it would be desirable to complete the expenditure rule with a feedback mechanism that would require a corrective action in case where the targeted reduction of the debt ratio fails to materialize due to non-cyclical weakness in revenue collection or shocks that would permanently worsen the debt ratio.

The debt rule would provide the authorities more flexibility in deciding how to achieve the primary balance consistent with the debt target. This could be done through expenditure reduction, or through increase in revenue. As long as the debt and primary balance objectives are met, stronger revneue collection would allow higher expenditure. The expenditure rule constraints the options more, by setting directly limit on expenditure growth. It is not expected that under the rule as discussed here, expenditure cuts would be used to strengthen the fiscal position. Thus, fiscal effort would need to rely more on increasing revenue—for which there is still room in Albania—by further strengthening tax administration, broadening tax base, and avoiding new tax cuts.

In conclusion, it should again be emphasized that a strong political commitment to fiscal discipline is crucial for fiscal rule to be effective. Any fiscal rule that is not backed by political support for its stated objective will sooner or later fail to achieve its objectives.

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[21] However, following the recent reduction of corporate and personal income tax to a single 10 percent rate, this risk is probably low in Albania.

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