An Approach to Evaluation of Efficiency of Public Debt Management

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Vietnam is in a process of changing its economic mechanism and public debt has its own role in the economic development. Increasing external debt in the ODA form has helped bridge the gap between saving and investment and deficit in the balance of payments. Internal debt provides the Government with a source of capital needed for public investment projects and socioeconomic development programs set forth by the plan. Management of public debt, however, is very costly, which comes from shortcomings in the mechanism for managing the public debt. The public debt management must be estimated according to criteria appropriate to the planned targets and international practices in order to perfect the mechanism, strategy and policy on the public debt management, reduce cost, maximize its benefits and produce positive effects on the economic growth.

By employing various methods (system study, analysis, comparison, statistics collection, and synthesis, etc.), the paper tries to use internationally- approved criteria to analyze the efficiency of public debt management in Vietnam, limit on the public debt, sustainability and safety of public debt, and mechanism and policies on public debt, thereby suggesting measures to enhance the public debt management.

1. On the efficiency of public debt management in Vietnam

The efficiency of public debt management, generally, is estimated by its stability and its equality of burden between present and future generations. Decisions to increase or decrease the public debt always have something to do with these aspects.

a. Sustainability of the public debt:

Determining the sustainability of public debt and debt service has an important meaning to decisions to increase or decrease the public debt; or select suitable sources to finance repayments.

- Vietnam's sustainability of public debt according to HIPC thresholds: Debt sustainability assessment is based on the following criteria:

+ Net present value (NPV) of debt-to-exports ratio represents relation between external debt with ability to repay debt of the country based on its export earnings.

+ NPV of debt-to-budget revenue ratio represents relation between external debt with ability to repay debt of the country based on its budget revenue.

The second criterion is only used when two conditions are ensured: (1) the exports-to-GDP ratio is greater than or equal to 30%; and (2) the budget-revenue-to- GDP ratio is greater than or equal to 15%. A country is considered as safe when its NPV of the debt-to-GDP threshold is smaller than 150%; and NPV of the debt-to-budget- revenue threshold is smaller than 250%.

By the end of 2005, the Vietnam's NPV of debt-to-exports was 39% after traditional debt relief measure was applied, which was much lower than the threshold of 150%. With the exports-to-GDP of 59.2% and budget-revenue-to-GDP of 21.3%, Vietnam ensured quality of fiscal ratios. By the end of 2005, the Vietnam's NPV of debt-to-budget-revenue was equal to 95%, much lower than the HPIC's threshold of 250%. Because the two criteria were lower than the HIPC's thresholds, Vietnam ensured its debt sustainability.

Many reasons help explain the above conclusion. Firstly, the best part of Vietnam's external debt is bilateral. Traditional debt relief affects more remarkably its debt sustainability in comparison with other HIPCs where debts are multilateral. Secondly, restructuring debt owed to Russia – Vietnam's biggest creditor – allowed Vietnam to cut some 85% of its external debt. Finally, different debt restructuring efforts in the past decade have reduced proportion of bilateral debt and the debt burden for Vietnam. When the Enhanced HIPC Initiative is introduced, Vietnam is a success story of the debt restructuring strategy.

Table 1: HIPC's thresholds for external debt

Debt ratios	Threshold	Vietnam (2005)
NPV of debt in percent of exports	150%	36%
NPV of debt in percent of revenue minus aid	250%	95%
Debt service as % of exports	15%	2%
Debt service as % of revenue minus aid	10%	6%

Source: UNDP, Project VIE/01/010

+ Debt service –to-exports (TDS/X) and debt service-to- revenue (TDS/DBR) are two measurements of liquidity introduced by the WB and IMF to assess the debt sustainability. TDS/X reflects ability to pay debt service by export earnings while TDS/DBR shows the ability to pay debt service by budget revenue. In a country with good liquidity, the TDS/X is less than 15% and TDS/DBR less than 10%.

By the end of 2005, Vietnam's TDS/X was 2% and TDS/DBR 6%. Thus, Vietnam's liquidity ratios of external debt, according to thresholds set by Bretton Woods organizations, were stable. Liquidity ratios lower than international standards were achieved by Vietnam's efforts to promote export and stabilize the budget revenue.

- Country policy and institutional assessment

The external debt sustainability assessed according to thresholds of debt ratios is based of experience of HIPCs and aims at preventing debt-relating shocks. In recent years, however, the WB has suggested a new method of assessment of public debt management called country policy and institutional assessment (CPIA). Countries with strong policies and institutions can suffer debt bigger than the basic debt sustainability level.

Table 2: Thresholds dependent on policy and institution

Threshold (%)	Country Policy and Institutional Assessment		
	Weak CPIA ≤3	Medium 3 <CPIA <9	Strong CPIA ≥ 3.9
NPV of debt-to-GDP ratio	30%	45%	60%
NPV of debt-to-exports ratio	100%	200%	300%
NPV of debt- to-revenue minus aid	200%	275%	350%
Debt service as % of GDP	15%	25%	35%
Debt service as % of revenue minus aid	20%	30%	40%

Source: WB 2005

This approach introduces thresholds based on traditional debt ratios as a basis doe assessing the country policies and institutions. Based on the new thresholds, the WB divides countries into poor, medium and strong performers. In assessing the policies, stress is put on management. The above table shows that, strong performers with a CPIA rating of 3.9 or higher are considered as having sustainable debt burden if their NPV of debt-to-GDP ratios is less than 60%, NPV of debt-to-exports ratio less than 300%, NPV of debt-to-revenue (minus aid) less than 350%, ratio of debt service to exports less than 35%, and ratio of debt to revenue (minus aid) less than 40%. Exactitude of this approach, however, is still controversial.

According to the new approach and numerical data about Vietnam shown in the Table 1, we see that in terms of institutions and policies to control the external debt Vietnam is among countries with CPIA ≤ 3, that is, among weak performers.

- Assessing internal debt:

Table 3: Thresholds of internal debt

Debt ratios	Threshold	Vietnam
Debt/GDP	20% – 25%	9%
Debt/Revenue	92% – 167%	32%
NPV of debt/revenue ratio	88% – 127%	
Debt service/ revenue ratio	28% – 63%	11%
Interest rate/revenue ratio	4.6% – 6.8%	1.6%

Source: UNDP, Project VIE/01/010.

The public debt has different meanings to the economy, which relates to potential benefits in development of finance market and effects in interest, investment and consequences of bankruptcy. Based on WB thresholds presented in the Table 3, the Vietnam's internal debt is at a safe level. Regarding ratios of debt to GDP and of interest rate to budget revenue, the Vietnam's internal debt indicator in 2005 was much lower than the WB threshold. This means that Vietnam can increase the internal debt without causing bad effects on the debt sustainability.

- Inter-generation equality:

According to Lerner (1948), the internal debt should not leave a burden on future generations. Members of the future generation may only owe one another. When repaying debts, income may change hands from persons with no Government bonds to bond holders, therefore, the future generations don't suffer more losses because spending stays at its possible level. Neoclassicists, however, maintain that borrowings reduce private investment. When the government carry out its projects based on tax take or loans, it should employ resources from the private sector, thus the internal debt may affect investment in the private sector and produce burden on the future generations. To solve this problem, public projects should be effective enough to generate private investment.

In the past few years, to ensure the inter-generation equality, the Vietnamese Government has tried to maintain a reasonable structure of debt in which the internal debt is bigger than the external one. The external debt is mostly from ODA source and well under control. By public investment, part of public debt is used for development projects and improvements in the infrastructure thereby supporting a sustainable growth. This effort shows itself in four fields: education, public health, communication and agriculture with the result that these fields, especially education and communication, developed well in the past decade.

It is an overview only. Closer examination shows that most infrastructure projects have poor efficiency. Vietnam spends over US$6 in investment to increase one more dollar in its output and this ratio is much lower than the international standard. Rainer and Klump (2003) conclude that growth effect of private investment has a positive value while that of public investment a negative one. Many publicly invested projects in the years 1996-2000 has low certainty and the WB estimated that the public investment projects helped reduce the poverty by only 1.3% a year. Projects with poor performance not only waste resources but also spoil chances to reduce the poverty (Vietnam Development Report 2004).

In short, regarding the public debt management, Vietnam is following a defensive strategy, that is, it tries to keep debt ratios at safe levels according to HIPC thresholds, instead of striving for a strategy well adjusted to new changes in the trend of economic globalization. Although projects based on public investment, including debt, had their contributions to the economic growth in the past decades, the public debt management is ineffective regarding the inter-generation equality, and it should be improved in the coming years.

2. Some suggested measures to improve performance of public debt management

Performance of public debt management is estimated by its ability to achieve planned targets. In another aspect, the performance could be estimated by examining the public debt sustainability (WB 2005). The public debt sustainability is a basis for implementation of targets of the public debt management: (1) ensuring government financing; (2) minimizing cost of borrowings in medium and long terms; (3) keeping risks at acceptable level. An effective public debt policy should determine if the strategy to control the public debt could turn loans into economic growth, reduce fiscal risks and ensure long-term debt sustainability. Public debt management should aim at maintaining debt sustainability and coordination of public debt management and macroeconomic policies. In managing the public debt, information must be updated timely and fully. Public debt managing authority must have ability to control new loans with a view to ensuring the debt sustainability. To improve the performance of debt management, the following measures are useful.

a. Linking the size of public debt with economic growth:

- Modeling of relations between public debt and GDP increases:

If

* i: actual lending interest rate;
* D_t : actual debt at the beginning of the year t;
* Y_t : actual GDP in the year t;
* g_y: GDP growth rate;
* d_t : debt-to-GDP ratio in the year t ($d_t \frac{D_t}{Y_t}$);
* B: ratio of budget deficit to GDP (not including debt service).

At the beginning of the year t (t + 1), we have:

$$D_{(t+1)} = (1+i)D_t + (B \times Y_t)$$

Dividing the two values by $(1+ g_y)Y_t$, we get:

$$d_{(t+1)} = \frac{D_{(t+1)}}{(1+g_y)Y_t} = \frac{(1+i)D_t}{(1+g_y)Y_t} + \frac{(B \times Y_t)}{(1+g_y)Y_t}$$

We deduce that $d_{(t+1)} = \frac{(1+i)d_t}{(1+g_y)} + \frac{B}{(1+g_y)}$

If the government wants to stabilize the debt ratios, it should ensure: $d_{(t+1)} = d_t = d$

And we have, by changing the above equation:

$$d = \frac{B}{g_y - i}$$

By using the above formula and examining growth rate and market lending rate, the government can control the budget deficit and stabilize the ratio of debt to GDP. To absorb the public debt, especially external one, into the economic growth, the government should promote exports (their share in the GDP must be greater than 60%), reform the fiscal policy, maintain financial discipline to stabilize the economy at macro level, support sustainable economic growth and accelerate the rate of poverty reduction. Other measures are to establish a mechanism for allocating financial resources to strategies to develop the economy and reduce poverty, stabilize the business climate and ensure social equality, enhance sense of responsibility and transparency in controlling public expenditures; ensure performance and validity of national programs and supply public goods to society.

- Balance between loan and domestic saving and investment:

The following simple equation could be used for determine possible increases in the public debt every year (t):

$$D_t - D_{(t+1)} = i \times D_{(t-1)} + (M_t - X_t) \qquad (1)$$

where D is the volume of debt by the year's end; i: average interest on debts; and : trade gap.

Dividing (1) by D_t - 1 and removing time element, we have:

$$d = i + \frac{[M - X]}{D} \qquad (2)$$

$$d = i + \frac{Y}{D} \times \frac{[M - X]}{Y} \qquad (3)$$

We have:

$$(M - X) = (I - S) + (G - T) \qquad (4)$$

Applying (4) to (3) we have:

$$d = i + \frac{Y}{D} \times \left[\frac{(I - S)}{Y} + \frac{(G - T)}{Y}\right]$$

From the above equation, we see that if (I - S) > 0 (investment is bigger than saving) or (G - T)>0 (budget expenditure is greater than budget revenue) and the budget deficit is not filled by difference between domestic saving and investment, the rate of debt increase will be greater. Thus, the best measure to reduce the need for external debt is to increase the domestic saving and cut public expenditure (G). In relation to targets of socioeconomic development in 2001-2010, the public expenditure in Vietnam is about 24% or 25% of the GDP. Of this expenditure, expenditure on economic development accounted for 25 – 28%, debt repayment 17 -18% and on regular spending 57 – 58%. The budget deficit was kept at 4% or 5% of the GDP; compensation for budget deficit from domestic sources of finance was equal to 3% to 5% of the GDP and from external debt 1% to 1.5% of the GDP.

b. Improving policies and institutions:

Improving the policies and institutions is one of new approaches that aim at enhancing performance of public debt management. Thresholds as a basis for the old approach are mostly based on experiences of HIPCs in the debt-relief program that aimed at preventing them from external shocks. The new approach is based on detailed framework of each country on foundation of its policies and institutions, and aims at analyzing debt actively. The basic novelty of this approach is quantification of thresholds of debt sustainability based on quality of policies and institutions. In other words, countries with good institutions could support a bigger debt. On the other hand, countries with weak policies and institutions should keep size of public debt under the HIPC's thresholds. Moreover, changes in the world economy and new requirements about public debt management force countries to review their policies and institutions. Vietnam, in its effort to integrate into the world economy is trying to liberate the financial sector, including account of capital. Due to increasing complexity of the portfolio of debts, including external and internal ones, Vietnam should reform its policies and institutions to deal with uncertainties of public debts.

Reform and improvements in national institutions and policies should aim at the following targets :

(1) Economic management:

- Macroeconomic management: Policies on market price and exchange rate should aim at stabilizing market prices. Aggregated demand by the government shouldn't hinder investment in the private sector.

- Fiscal policy: The primary balance is managed to ensure sustainability of the public finances. Public expenditure/ revenue can be adjusted to absorb shocks if necessary. The provision of public goods, including infrastructure, is consistent with medium-term growth.

(2) Structural policies

- Trade: This criterion assesses how the policy framework fosters trade in goods. Two areas are covered: (a) trade regime restrictiveness focusing on the height of tariffs barriers, the extent to which non-tariff barriers are used, and the transparency and predictability of the trade regime; and (b) customs and trade facilitation, including the extent to which the customs service is free of corruption, relies on risk management, processes duty collections and refunds promptly, and operates transparently.

- Financial sector: Three dimensions are covered; (a) financial stability; (b) the sector's efficiency, depth, and resource mobilization strength; and (c) access to financial services.

- Business Regulatory Environment: Three subcomponents are measured: (a) regulations affecting entry, exit, and competition; (b) regulations of ongoing business operations; and (c) regulations of factor markets (labor and land).

(3) Policies for social inclusion and equity

- Gender Equality: This criterion assesses the extent to which the country has enacted and put in place institutions and programs to enforce laws and policies that: (a) promote access women to productive and economic resources; and (b) enhance women's status in society...

- Equity of Public Resource Use: Public expenditures and revenue should affect the poor and is consistent with national poverty reduction priorities.

- Building Human Resources: The breadth and quality of a country's human capital is a key determinant of its economic growth and social development. This criterion assesses access to and quality of: (a) health and nutrition services, (b) education, training and literacy programs, and (c) prevention and treatment of HIV/AIDS, tuberculosis, etc.

- Social Protection and Labor: This criterion assesses government policies that reduce the risk of becoming poor, assist those who are poor to better manage further risks, and ensure a minimal level of welfare to all people, such as (a) social safety net programs; (b) protection of basic labor standards; (c) labor market regulations; and (d) pension and old age savings programs, etc.

- Policies and Institutions for Environmental Sustainability: This criterion assesses the extent to which environmental policies foster the protection and sustainable use of natural resources and the management of pollution.

(4) Public sector management and institutions

- Property Rights and Rule-based Governance: This criterion assesses the extent to which private economic activity is facilitated. Many dimensions should be examined, such as: (a) legal basis for secure property and contract rights; and (b) predictability, transparency, and impartiality of laws affecting economic activity, etc.

- Quality of Budgetary and Financial Management: This criterion assesses the extent to which there is: (a) a comprehensive and credible budget, linked to policy priorities; (b) effective financial management systems to ensure that incurred expenditures are consistent with the approved budget, (c) timely and accurate fiscal accounting and reporting.

- Efficiency of Revenue Mobilization: (a) tax policy and; (b) tax administration at the possibly lowest cost.

- Quality of Public Administration: (a) Policy coordination and responsiveness; (b) Service delivery and operational efficiency; etc.

- Transparency, Accountability, and Corruption in the Public Sector:

CPIA criteria are developed to the extent in which they provide support for sustainable growth, poverty reduction and effective use of public debt.

Conclusion

In debt structure of a country, the public one usually accounts for the biggest share. This financial structure is complex and contains many potential risks affecting the national financial stability, especially in the globalization trend. So the government has paid a lot of attention the task of improving performance of debts, and public one in particular. In the past decade, Vietnam succeeded in implementing a careful debt management policy and keeping the size of public debt at a safe level. To deal with the globalization, Vietnam should perfect its institutions and policies with a view to moving from a defensive to an adjustment strategy ■

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