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Vietnam’s public debt

Problems and Suggested solutions

Trang Nguyen

Bachelor’s Thesis

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Valitse kohde.

SAVONIA UNIVERSITY OF APPLIED SCIENCES **THESIS**
Abstract

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Abstract

Public debt crisis currently becomes a common concern of many countries. In Vietnam, public debt is at risk level and tends to increase rapidly. This thesis analyzed the current situation and causes of Vietnam's public debt, and suggested some solutions to control public debt.

The research flows from the cases in European countries and Japan to Vietnam to study the context of public debt crisis and policy-responses of those countries. The study was conducted by means of the qualitative research method using different theories, together with gathering and analyzing facts and figures. The major of used data in this was secondary which based on books, working papers, reports, online-material, etc. of the world's major economic and development organizations, governments, governments' departments, etc.

Even though Vietnam's debt remains well in the safe zone, there are increasing risks in capital mobilization and repayment. Facing the problems of rising public debt, the government has to reduce budget spending as well as have a strategic plan to borrow and use loans efficiently.

Based on the analysis, the strategic solutions have been suggested. The study provided policy suggestions to improve the debt management in order to avoid the risks of crisis in Vietnam.

Keywords

Government budget, financing government deficit, public debt, risks

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Abbreviations

ADB	Asian Development Bank
CPIA	Country Policy and Institutional Assessments
EC	European Commission
EU	European Union
EUR	Euro
GDP	Gross Domestic Product
ICOR	Incremental Capital Output Ratio
IMF	International Monetary Fund
JPY	The Japanese Yen
NAMA	National Asset Management Agency
OCR	Overnight Call Rates
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
PIIGS	Portugal, Ireland, Italy, Greece, and Spain
SDR	Special Drawing Rights
SOE	State Owned Enterprise
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
USD	The United States Dollar
VAT	Value-Added Tax
VND	The Vietnam Dong
WB	World Bank

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1 INTRODUCTION

The European debt crisis originated in Greece since 2010 and strongly spread to other European countries in 2011 is becoming a burning issue and attracts the attention of many economic researchers as well as policy makers around the world. This crisis was seen as the second stage and was an inevitable result of the global financial crisis in 2008. However, the causes and consequences to the national economy as well as to the whole region have not been studied in earnest and profound in Vietnam.

In recent years, after the rapid growth period, Vietnam's economy has shown signs of slowing down. This was explained by the external influence from the global financial crisis and Vietnam's movement to the stage that can not use investment flows to boost growth anymore. The statistics of Vietnam and the International organizations showed that Vietnam frequently has budget deficits and public debts also tends to increase, and the investment effeciency is decreasing. Many organizations and economic experts, including the International Monetary Fund – IMF has warned that Vietnam is at high risk of debt crisis in next ten years if this situation still persists.

Therefore, the study's objective is to analyze the current situation of Vietnam's public debt by gathering the most relevant public debt theory and supported with practical debt crises in Europe and Japan. Finally, the thesis provided some policy suggestions to help improve the debt situation in order to avoid the risks of crisis that Vietnam may face in the near future by analyzing together the policy responses of Europe and Japan with Vietnam's context.

Structure of the study

The thesis started with the fundamental concepts of the research which are government budget, budget revenue, and budget expenditure. Then, the concepts of public debt, Indicators for monitoring public debt, public debt in relation to fiscal policy and monetary policy and the importance of public debt management were explained.

The third chapter discussed in details the methodology of the thesis: the process of selecting methods for this research, the collection and analysis of data and the limitation of the study.

Chapter four and five are the main research parts. First, the work was to analyze the public debt crisis causes and consequences of Europe and Japan. In addition, it also discussed the policy responses being used by the countries to draw the experience in public debt management for Vietnam. Next, chapter six was to focus on the issues of Vietnam's public debt, including the current status of budget revenues and expenditures, deficits and debt level, and public debt risks.

Finally chapter six concentrated on suggesting solutions for the debt problem in Vietnam based on learned experiences from the crises in Europe and Japan and their policy options for lowering debt levels.

2 PUBLIC DEBT

In this chapter the most relevant concepts of public debt is explained from government budget and its revenues and expenditures to public debt and its classifications. In addition the importance and impacts of public debt and ways to finance budget deficit and stabilize debt are addressed from various perspectives.

2.1 Government budget

Government budget refers to national budget or state budget. The government budget is a country's basic financial plan, based on established policies that the government intends to implement in the following year, in order to assign a specific spending numbers from which the government seeks funding. State budget is a useful management tool because it provides a list of revenues that the state is allowed to collect and a list of expenditures within the approved budget, helping the government manage and control its revenue and expenditure during each fiscal year to avoid waste and ensure that budget spending is at a reasonable level and can be funded by the determined revenues. (Parkin, M. & Powell, M. & Matthews, K. 2008, 592.)

Revenue

Budget revenue is the amount of money the government receives from diverse sources for goods sold and services provided. The revenue includes the entire amount accumulated to form the budget in order to meet the expenditure needs of the government. There are two types of public revenue: tax revenue and non-tax revenue. (Chand, S.N. 2008, 61-62.)

Tax revenue is specified as a fund financed through different taxes levied to meet the government's general expenses incurred for the public good, without expecting benefits or returns. Non-tax revenue derives from public income received through the administration, commercial enterprises, donations and grants to the government. It consists of receipts such as education and public health care fees, fines, public sector undertaking profits, earnings from public lands, forest, mines, and also interest from loans. (Chand, S.N. 2008, 61-63.)

Tax is the most major and important source of revenue, accounting for 80% to 90% of the total state budget revenues. This type of revenue is mandatory contributions of

personal and corporate income for the government, irrespective of any corresponding benefits to individuals or corporate who pays tax, also called tax payers. (Chand, S.N. 2008, 92-95.)

Taxes might be classified in methods of tax collection, the tax base, or also the rate of taxation. First, by the method of collection, taxes include direct and indirect taxes. Direct taxes are collected directly on the taxable income of the person, named as income tax, or on the taxable profit of the corporate, called as corporate tax. Value added tax, indirect tax, is paid indirectly by consumers through collecting agencies as retailers. Second, the tax base is the “object” on which tax is imposed. By the tax base, taxes are divided into three groups, which are taxes on revenue (income taxes, corporation taxes, and petroleum revenue taxes); taxes on spending (value added taxes and customs and excise taxes); and capital gains taxes and inheritance taxes. Finally, a rate (or series of rates) of taxation is considered as progressive, proportional, or regressive taxes. (Griffiths, A. & Wall, S. 2007, 350-352.)

Expenditure

Incurred by the government, expenditures are not only for providing social welfare but also for assuring economic stability and economic growth. In a broad sense, public expenditure can be classified as revenue expenditure and capital expenditure. Revenue expenditures neither create assets nor do cause reductions on liabilities of the government, for example, spending for pensions, allowances and scholarships are defined as revenue expenditures. Besides, the amount that the government owns domestic corporation equity or multinational share to create assets or reduces liabilities by loan repayment is classified as capital expenditure. (Jain, T.R. et al. 2006, 383-384.) Besides, there are many other ways of classification, such as (1) development expenditure and non-development expenditure; (2) plan expenditure and non-plan expenditure; and (3) transfer expenditure and non-transfer expenditure. (Jain, T.R. et al. 2006, 384.)

If expenditures exceed revenues, it will lead to budget deficit. To administrate expenditure, the government should follow guidelines such as promoting the maximum social welfare; avoiding unnecessary spending and wastage of financial resources; having authorizing expenditure; being flexible to spend based on the need or cases; keeping well within the revenue to avoid budget deficit; and promoting economic development and stability (Jain, T.R. et al. 2006, 385-386.)

2.2 Public debt

“The government debt is a stock; the government budget deficit is a flow.” (Mankiw, N. 2009, 18.)

According to the World Bank – WB (2002), the public debt is the total debt of the government and the government-guaranteed debts. Based on the IMF’s definition (2010), public debt is understood the obligation to pay the debt of the public sector. The IMF also gave the specific definition of the public sector, including the government sector and public corporation sector (Figure 1). (IMF 2010.)

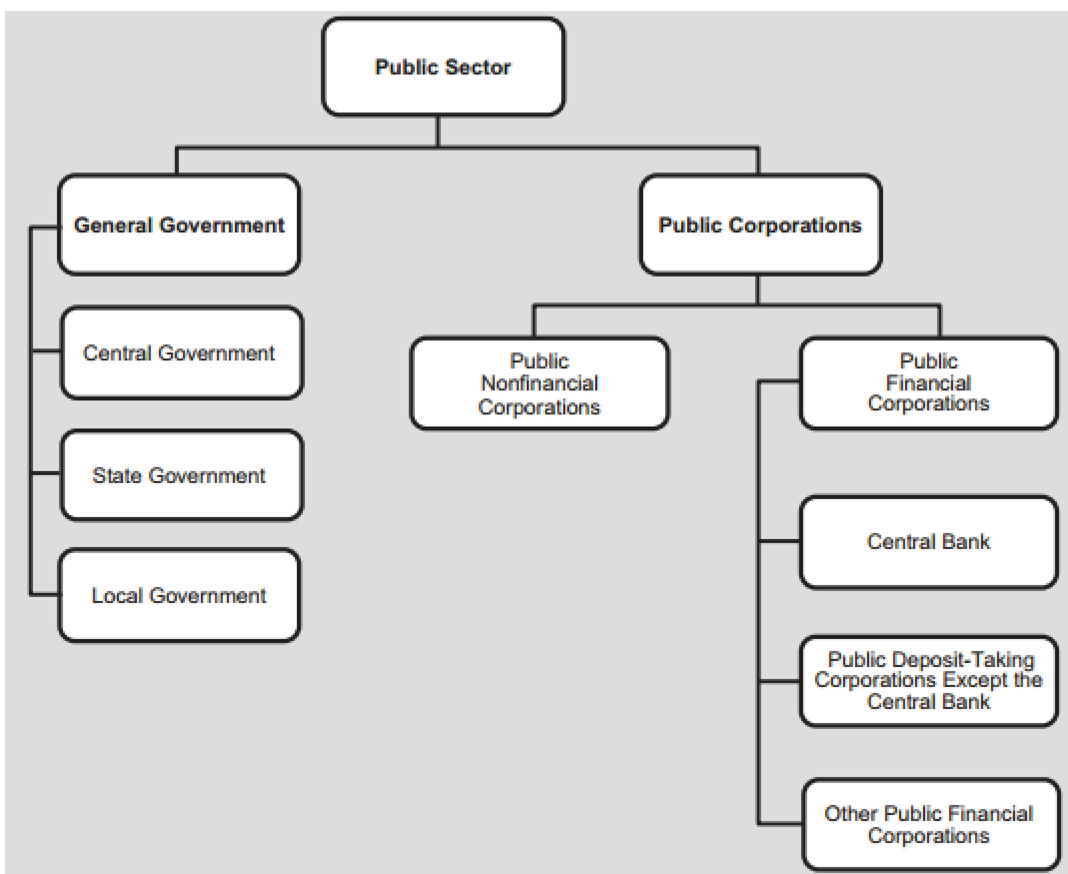

FIGURE 1. The public debt sector and its main components (IMF 2010.)

The left branch includes all levels of government, from central to local. The right branch or public corporations sector includes the financial and non-financial institutions. The non-financial corporations do not operate in the financial sector such as national airlines, national electricity corporation, and national railway, etc., or also are non-profit institutions such as hospitals and public universities. The financial corporations receive government financial support and generate in the financial sector. They provide services of deposits and pay interest on the public sector, also financial advi-

sory insurance or pension fund services. All debts of public sector are under the government's guarantee in case of default. (IMF 2010.)

2.3 Classifications of public debt

Before classifying public debt, there should be a clear distinction between public debt and private debt. If the public debts are owed by the government or government's guarantee, the private debts are purely obligations of the private individuals or organizations. Public debt and private debt compose total debt of the economy. (IMF 2003.)

There are many criteria for the classification of debt, and each criterion has a different meaning in the management and use of public debt. According to the criteria of geographical origin, the public debt is composed of two types: domestic debt and foreign debt. The proportion of government debt owed to domestic creditors refers to internal or domestic public debt. The domestic creditors include citizens, banks, firms, and others within the country, therefore, the debts are repayable in local currency. Instruments to perform domestic debt include bonds, treasury, etc., of those bond is most common. While the government borrows from external creditors, it refers to foreign or external public debt. The foreign debts including foreign government bonds or foreign loans come in the form of foreign currency and are more difficult to control than the internal debts. The classification of domestic debt and foreign debt has important implications for debt management. This classification in terms of information will help more accurately determine the balance of international payments. And in some respects, the management of foreign debt was to ensure the money stability of the country, because most of foreign loans are in freely convertible foreign currency or other means of international payment. (Cosio-Pascal, E. 2014, 13-27.)

By maturity or time duration, public debts can be classified as short-term debts and long-term debts. Short-term debts are usually incurred within a period of one year, and long-term debts are those are taken for more than one year. The government might use short-term loans to offset the temporary deficit and long-term loans to fund its developmental activities. (Cosio-Pascal, E. 2014, 16-17.)

Another common way to classify the public debt is by instrument. By this way, public debt is derived from the authorized state agency issues debt instruments to borrow. These debt instruments have short or long duration, usually anonymity and ability to transfer the financial markets. The public debt consists of money market instruments,

loans, currency and deposits, bonds and notes, trade credits, and other debt liabilities. (Cosio-Pascal, E. 2014, 24-26.)

In addition, based on creditor quality, the government and government-guaranteed debt for long-term is defined as private and official. Public creditors are those who lends by the public budgets, in opposite, the private creditors use the private sources. To sum up, the Figure 2 shows the public debt and its components. (IMF 2003.)

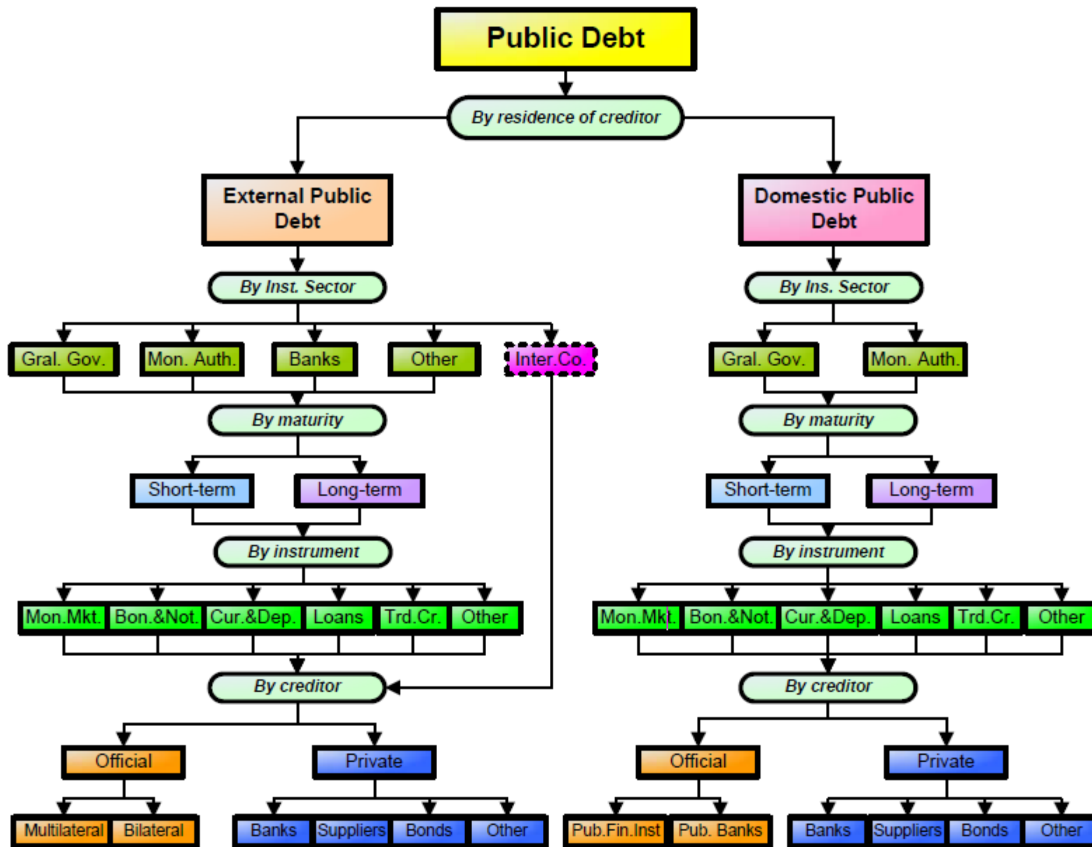

FIGURE 2. Public debt and its components (IMF 2003.)

2.4 Indicators for studying public debt's performance

There are three kinds of indicators used to study a country's public debt's status. The first group is vulnerability indicators. They measure the risk generated by public debt within the current economic context. The second group is sustainability indicators, used to assess the government's competence in solving upcoming emergencies. The third group of indicators shows the liabilities' market performance. (Issai 2010, 5.)

Some commonly used vulnerability indicators are ppublic debt to GDP, debt service to domestic budgetary, current value to domestic budgetary revenue, etc. The public debt to GPD ratio reflects the scale of public debt compared to the income of the whole economy because social wealth will be partly deducted to pay for the debt. This is an indicator frequently used to compare the scale of public debt across countries. With macroeconomic variables, other perspectives to measure vulnerabilities are observed using the following indicators: foreign debt to exports, net international reserves to foreign debt and amortization to external debt payments. The ratio measuring foreign debt to goods and services exports calculates the level of debt burdening over exports or the ability of getting currencies. (Issai 2010, 8-11.)

Traditionally, sustainability indicators are used to show connections between fiscal balances with some main indicators such as fiscal consistency indicator, Buiter's indicator, short term primary gap indicator, macro-adjusted primary deficit, sustainable fiscal position indicator, and currency availability indicators. Those financial debt indicators supervise debt solvency. (Issai 2010, 13-22.)

Finally, financial debt indicators show two types of risks, which are market risk and credit risk. The market risk is an amount the investor might lose because of the market price changes or other variables like interest rates or exchange rates. Some common indicators to measure the market risks include interest rates and yield curve, weighted average maturity and duration, cost at risk, etc. When a country defaults on its debt, it results in credit risk and reputation risk. (Issai 2010, 23-32.)

2.5 Debt threshold

By assessing the debt's performance indicators, it is necessary to define a debt threshold. If public debt (as a percentage of GDP) of a country reaches the threshold, there shows a decline in economic growth. Many studies used quantitative models to determine the relationship between public debt and economic growth. Besides, the amount of foreign debt also plays an important role in the risk assessment of the economy, especially in developing countries, as these countries cannot borrow abroad in their own currency (original sin). (Checherita, C. & Rother, P. 2010, 9-12; Eichengreen, B. & Hausmann, R. 1999, 3.)

A pioneering research developed by Reinhart and Rogoff (2010) based on observational data of 44 emerging and advanced economies and statistics in about two centuries has launched the most basic thresholds of debt, attracted a lot of attention from

economists as well as policy makers. More specifically, the relationship between the ratio of public debt, inflation and growth are based on the analysis of over 3700 annual data on political systems, institutions, exchange rate changes as well as currency system, and the other historical conditions. The results indicated that the debt threshold is 90% of GDP, while the national public debt exceeds this figure, the economic growth will begin to decline. However, the authors do not believe high debt ratios can lead to inflation in advanced economies. As in the emerging economies, inflation often rises sharply as debt increases. Reinhart and Rogoff (2010) also analyzed further based on the data from the external debt crisis, including public debt and private debt. Because the advanced economies are generally independent on foreign loans, this research only focused on the emerging economies. Results indicated that, if foreign debts hit 60% of GDP, economic growth will start declining 2%, and if exceeding 90% of GDP, the growth rate will be reduced by half.

Another research by Caner, Grennes and Koehler-Geib (2011) continued to in-depth analysis of the debt threshold. This research used more data than Reinhart and Rogoff's research, including data on public debt, growth, and openness of the economy, inflation, and GDP in the previous period of 101 countries (75 developing countries and 26 developed countries) in the period 1980-2008, and used econometric model. The results showed that the average threshold of debt for all taken countries was 77% of GDP, when debt level crosses over this threshold, economic growth begins to decline. In addition, when the same model was applied to the group of developing countries, the figure is 64% of GDP.

Kumar and Woo (2010) also carried out a similar research, with data from 38 advanced and emerging economies with a population of over 5 million people, lasted for four decades and also used econometric model. Like Reinhart and Rogoff, the authors also found an inverse relationship between debt and growth if public debt exceeds 90% of GDP. The authors also found that in emerging economies, the impact of public debt is larger than in the advanced economies. Specifically, if the scale of public debt increases by 10% of GDP, economic growth will decline from 0.15% to 0.2% in the advanced economies, while the figure in the emerging economies ranges from 0.3% to 0.4%. In addition, initial high debt level will also create more risks. In the countries where public debt exceeds 90% of GDP, an increase of 10% of debt to GDP associates with reduced growth of 0.19%; even if the initial debt level ranges from 30% to 60% of GDP, this figure is only 0.11%. Besides, Kumar and Woo (2010) also extended their model to determine other consequences of public debt. The con-

clusion showed that high public debt will reduce investment, slow down the growth in the amount of capital per worker, and consequently lead to yield loss.

A further study of Presbitero (2010) based on total public debt figures in 92 countries with low and average income in the period 1990-2007 also seek the thresholds of debt. This study found negative consequences for growth if public debt is at around 90% of GDP. In excess of this level, a worse consequence will occur with growth because of poor economic management as well as poor economic institutions. Presbitero concluded that industrial countries succeed more than developing countries in borrowing and using the domestic and foreign finances, because the developing countries have to suffer the possible risks affecting on investment due to capital flight, rotation policy or investment crowding out, which occurs frequently with large public debt. In contrast, in developed countries, negative consequences from too much debt tend to overwhelm the obtainable benefits from other sources.

If the amount of public debt (as a percentage of GDP) exceeds the thresholds, the economy will be at risk of macro economy. The table below is to sum up the research findings on debt threshold.

TABLE 1. Summary of research findings on debt threshold

Research	**Reinhart & Rogoff (2010)**		**Caner, Geenes & Koehler-Gelb (2011)**		**Kumar & Woo (2010)**	
Apply to	Advanced and emerging economies	Emerging economies	Developed and developing countries	Developing countries	Advanced and emerging economies	Low and average income countries
Debt threshold (% of GDP)	90% (public debt)	60% (foreign debt)	77% (public debt)	64% (public debt)	90% (public debt)	90% (public debt)

In recent years, the World Bank and IMF have launched a new approach called the Debt Sustainability Framework (DSF). This system divides countries into three groups corresponding to three levels of policy and institution performance, evaluated based on the World Bank's Country Policy and Institutional Assessments (CPIA) to identify a safe debt threshold for each group of countries. The safety threshold is calculated based on the debt average of the countries in the same group in a period of 20 years. To evaluate the safety of debt level of a country, debt indicators will be compared with the thresholds, shown in the Table 2 as below. (IMF & WB 2011.)

TABLE 2. Debt Thresholds under the DSF (IMF & WB 2011.)

	PV of debt in percent of			**Debt service in percent of**	
	GDP	Export	Budget revenues	Export	Budget revenues
Weak Policy	30	100	200	15	25
Average Policy	40	150	250	20	30
Strong Policy	50	200	300	25	35

From the comparison of debt indicators compared with the threshold levels, the IMF classified four risk levels: low risk (the entire index is lower than the threshold); moderate risk (when the debt ratios below the threshold in normal conditions but may be higher than the threshold level when external shocks or sudden changes occur in the economic policy macro); high risk (the index is higher than the threshold level of debt, but the economy has yet to have any difficulty in repaying debts); and in debt threshold (the index is higher than the threshold level of debt and the economy has difficulty in repaying). (IMF & WB 2011.)

2.6 Public debt in relation to managing fiscal policy and monetary policy

The relation between public debt management policy and the fiscal policy has many facets. According to the traditional view, the budget deficit or tax cut causes an increase in consumption and a decrease in national saving, which raises the interest rate. Interest rate increase raises the cost of investment and lowers investment, also known as "crowding out investment effect". Investment reduction lessens a steady-state capital stock and output level, which lowers consumer spending and economic well-being. (Mankiw, N. 2009, 63-64, 184-186, 197-198, 211-213.)

Also, a reduction in nation savings leads to external borrowing to finance investment, leading to a trade deficit. As a result, the domestic currency value increases in comparison with foreign currencies, causing competitive advantage loss in the world markets. (Mankiw, N. 2009, 343-345.)

In addition, a budget deficit is used in stabilizing the economy when it falls into a recession. Consequently, the government needs to boost taxes, which automatically fall in the recession, or cut consumer spending, though aggregate demand would be depressed in further. In some cases a budget deficit is necessary to smoothing tax. For instance, a high tax rate on labor earnings lowers the motivation of working long

hours. Another case is to consider a budget deficit effect is intergenerational redistribution. For example, the government must borrow to cover the war cost. Later, the debt will be retired by shifting a tax burden to next generations. All in all, a budget deficit is a proper solution in the fiscal policy during the cyclic occurrences. (Mankiw, N. 2009, 422-423.)

Beside fiscal policy, debt management policy also has important links with monetary policy. As discussed about financing government debt, one of the methods is monetization which leading to inflation, or even hyperinflation because government uses the inflation tax as a payment to its spending. In addition, when debt is at a high level, the government tends to create inflation to reduce the real value of the debt. By printing money, the prices rise, thereby that debt is eroded in its real value. (Mankiw, N. 2009, 423; Burda, M. C. & Wyplosz, C. 2001, 378-380.)

2.7 The need for public debt management

Countries, particularly developing countries, want to achieve rapid growth; the government often uses expansionary fiscal policies, increases spending, increases investment and cuts tax to stimulate aggregate demand, to boost production, and to promote economic growth. However, implementation of expansionary fiscal policy means increasing the budget deficit and government debt to offset the deficit. Thus, public debt is an inevitable problem of countries around the world. (Su, T. & Bui, H. 2009, 153.)

Public debt is important to a country's economic growth and social development. It is allocated to infrastructure investment programs and projects as well as social welfare ones and cannot be recovered under the state budget expenditures. Also, short-term loans are used to cover temporary deficit of the state budget. In developing countries, the government needs use public debt to increase the investment amount to break the vicious circle of poverty. Public debt is thus a very important mean to secure capital for investment. (Jain, R. et al. 2006, 434-435.)

The government also uses public debt to control the economy. The increasing money supply makes prices go up. To bring prices down, the government needs to reduce the supply of money by seeking loans from the public. In addition, during depression, low aggregate demand in the country leads to low production and high level of unemployment. To avoid this situation, the government has to increase public expenditure

by borrowing. Thus, public debt is an important means to control the economy and alleviate problems caused by depression. (Jain, R. et al. 2006, 434-435.)

The impact of public debt

Covering the budget deficit by borrowing domestic or foreign loans has adverse influences on the macroeconomic, political and social environment.

The short-term negative impact of public debt on economic activity could be very small. In contrast, the long-term impact is undeniably significant. When the budget deficit is financed by domestic borrowing, the financial resources will be shifted from the private sector to the public sector. This mobilization will impact the capital markets, increase credit demand and push up interest rates. Interest rate increase raises the cost of investment and thus reduces investment, also known as "crowding out investment effect." (Nautet, M. & Van Meensel, L. 2011, 9-15.)

However, in the case of financing deficit by foreign borrowing, crowding out investment can be limited by the use of external resources, thereby reducing the pressure on credit in domestic market and the uncertainties in the economy. Yet foreign loans have other negative impacts on the economy. At first, a large flow of foreign currencies into the country will reduce pressure on the balance of foreign currency; the exchange rate will tend to move in the direction of increasing the local currency and affecting the balance trade. But these are only short term effects. In the mid and long term, the government must balance foreign currency to repay the principal and interest will drive up demand for foreign currency, devaluate the domestic currency, thereby increasing costs of machinery and raw material import (usually a sizable portion in developing countries), and raising the input costs and leading to inflation. Simultaneously, rising rates makes the cost of debt repayment more expensive and increases the risk of insolvency if the debt exceeds the revenues. (Nautet, M. & Van Meensel, L. 2011, 9-15.)

Furthermore, after borrowing the government might have to raise taxes and cut spending to free up resources to repay principal and interest. If the cut is reasonable and moderate, it would not cause much impact on the economy. However, budget cut is not easy to control and implement. When taxes increase too much, saving and production investment will reduce, affecting the growth rate of the economy. Especially in time of economic downturn, when the country falls into prolonged deficits and is forced to have debt to offset the deficit, spending cut and tax increase can push the

country back to recession. In that case, the chance to rescue the economy becomes more and more difficult. (Nautet, M. & Van Meensel, L. 2011, 9-15.)

Due to debt crisis, fiscal balance deficit, the government needs to raise the loan repayments required public by issuing bonds and borrowing from the central bank, having recourse from other countries or international organizations like the IMF or raising tax to offset the budget deficit, besides implementing austerity measures to reduce spending. The issuance of more government bonds leads to bond yields rise as the government raised interest rates the new bonds raised buyers. When the central bank finances deficits by issuing more money, the increase in money supply causes inflation pressures. In addition, the spending cuts and tax increases will reduce direct investment, and then constrain economic growth, showed by a decline in GDP growth rate. As a result, the ratio of public debt to GDP rises up. The spending and investment reduction will lead to the high unemployment rate. (Mankiw 2008, 589-591.)

On the other hand, the budget deficit has causes the loss of confidence of citizens and new investors to the national economy, leading to the national currency depreciation. That could cause a sharp decrease in bond and stock markets, leading to a decline in the stock price. (Mankiw 2009, 488-489) Figure 3 below is to sum up how public debt problems are in relation to managing policies.

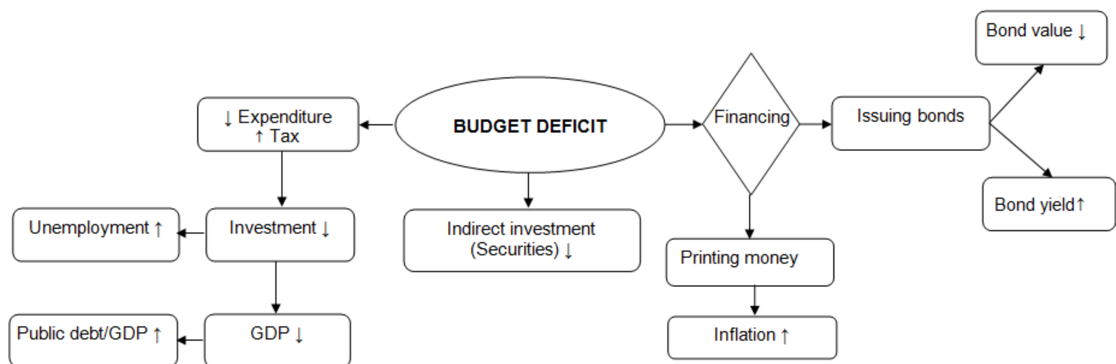

FIGURE 3. The effects of public debt or budget deficit

The prolonged budget deficit and debt will increase the debt burden. Once a country falls into a debt crisis, budget deficit is commonly prolonged and out of control. It leads to debt increase, interest payments increase, then more debt taking, in turn exacerbating the budget deficit and continuing debt. Specifically, the debt grows until the total debt exceeds the affordability of budget revenues and lead to insolvency. (Su, T. & Bui, H. 2009, 113.)

In addition, foreign debts, especially conditional ones, make the country more dependent on external factors under unfavourable conditions. Sometimes this will indirectly affect the domestic economy. Also, foreign debts might diminish the country's political power in bilateral and multilateral relations with creditors. Moreover, the risk of insolvency could decline political sovereignty when the country is suffering from pressure from creditors and international financial institutions. Normally, it is the pressure to cut spending, boost taxes, reduce social welfare, change economic trends, reform institution, or change management apparatus. (Su, T. & Bui, H. 2009, 113.)

Raising taxes and tightening spending, specifically cutting social benefits and allowances have a direct impact people's lives, especially the poor, who usually have to suffer the most from changes in government policies. Too aggressive budget cut can even lead to public opposition expressed through strikes or demonstrations. (Su, T. & Bui, H. 2009, 113-114.)

Stabilizing public debt

There are three methods the government can use to stabilize the public debt, and then to reduce a high ratio of public debt to GDP, including cutting the deficit, seigniorage and the inflation tax and default. Those three ways are in respect of forms of taxation, which are: standard taxation, taxing those who happen to hold nominal assets and taxing bondholders respectively. (Burda, M. C. & Wyplosz, C. 2001, 378.)

First, cutting deficit means boosting tax receipts or cutting public spending. This method would negatively affect the economy. As mentioned, tax increase leads to a decline in savings of the private sector, especially for developing countries where the average income per capita is low; tax increase is therefore not a method should be used. On the other hand, public spending cuts are only effective when properly done by cutting wasteful state expenditures, irrational or ineffective expenditure like subsidies for society and state-owned enterprises (SOEs). But, politically, this method is the most difficult to implement because it cuts interest of groups of people in the country, namely government employees. (Burda, M. C. & Wyplosz, C. 2001, 378.)

Second, by seigniorage and inflation tax, inflationary finance is implemented to ease the debt burden. Seigniorage refers to money issuing. This method will help the government to quickly mobilize funds to balance the state budget without the costly expense. There are two forms of money issued to compensate the deficit: directly or indirectly. If the central bank directly issues loans to the government, the ability of

control inflation in the period after the loan would be very limited. Moreover, seigniorage is the cheap source of financing but gives the negative effects of inflation on the economy, especially with investors (because the price increases, the real value of their investment reduces) and people (because of rising prices, the value of their real wages falls). Therefore, as recommended by the World Bank, the government of a market economy should not issuing money directly, but instead indirectly, i.e. the central bank gives the government loans secured by government bonds. However, the requirement for this method is the central bank has to release the money at a reasonable rate, consistent with the development of the economy. The government has to impose better policies to use the issued money more efficiently, create new production capacity to not only adjust inflation but also promote economic growth. This is not easily done, especially when the government has to pay foreign debts in foreign currencies, so the money issuance is usually the last method for the government to raise capital to balance the state budget. The second way is inflation tax on money and nominal bonds. Money printing is usually associated with inflation. The government takes debt in form of nominal assets. Therefore, when the government implements seigniorage to increase the money supply, it causes inflation. Issuing money to finance expenditure refers to imposing an inflation tax. As prices rise, the real value of debt falls, or the real value of money bondholders owed to the government falls. This method of inflationary finance is considered as a tax on money and bondholders. (Burda, M. C. & Wyplosz, C. 2001, 378-380.)

Finally, the simplest but barbarous way to finance debt is repudiation. When the government goes to default, it sends out a poor creditworthiness and leaves unforgettable scars on the government reputation in domestic market and in around the world. In the case of default, domestic debt implies differences from foreign debt. If public debt was hold by residents, accumulation of debt is redistributed to intergenerational income. Instead, foreign borrowing will lead to a dependence on lender, bounded by conditions given by foreign entities. It can be seen that the advantages of domestic borrowing are being easy to deploy; contributing to withdrawal of excess money in circulation to prevent immediate inflation; giving financial markets a large amount of high quality and low risk goods; and helping government avoid being dominated from foreign entities. However, this method also contains shortcomings because domestic public borrowing for the state may be limited. Moreover, government bonds are usually not low risk but high in interest rates so they will not appeal to some investors who prefer risk. (Burda, M. C. & Wyplosz, C. 2001, 381.)

3 RESEARCH METHODOLOGY

The thesis topic was found while the debt crisis is the most concern issue around the world. Domestic and foreign borrowing of countries to stabilize and develop the economy is inevitable, because the limit budget revenue is not enough to provide too large and diverse government spending. So, how to borrow and use the debt is a very complex problem that not all countries can manage and control. This research was made to find the causes, consequences and policy responses of the countries having high debt level and experiencing the debt crisis namely European countries and Japan. Then, the research was to study the real situation of Vietnam's public debt and its management. The last intention is to propose appropriate solutions for Vietnam to manage and control public debt efficiently.

3.1 Research method and data collection and analysis

Due to the topic field being macroeconomic, this research is based wholly on secondary data, information gathered and achieved by others (Church, R. 2001, 1). Gathered data from macroeconomic and public finance books and international electronic collections was to build the theoretical framework. The situation of public debt in European countries and Japan collected by desk research through articles, journals and internet sources. Facts and figures from international organizations such as the IMF, World Bank and OECD and from publications of the governments were primarily collected, synthesized and analyzed.

The research was implemented using qualitative data research, mainly by the grounded theory research, in this, data collection, analysis and theory has a "reciprocal relationship" with each other. Actually, grounded theory is general research methodology, allowed to use with either qualitative or quantitative data. The process of this work started from data collection and analysis to coding and interpretation. Thereby, the research solutions were found. (Egan, T. 2002, 277.)

The most important part of this research is about Vietnam's public debt. The work analyzed the current status of Vietnam's public debt by focusing on three target issues: government revenues and expenditures, budget deficit and public debt, and risks of public debt. The analyzed data in this part was accessed in Vietnamese language and international language. The data was gathered from internet-based publications of Ministry of Finance and Central bank of Vietnam and statistics of the inter-

national financial organizations. This work was to provide the understanding of the way Vietnam allocated the budget, the status of budget deficit and public debt and the risks of public debt of Vietnam, combining with the policy responses of European countries and Japan to generalize the direction of Vietnam's public debt management and then to propose the main solutions for Vietnam in coming years.

In the process, the researcher used qualitative methods to compile the facts and figures scientifically from the current debt crises, consistent with the real situation of public debt management in Vietnam; to clarify the similarities and differences of the researching issue through the phases, from which to have comments, assessments and recommend solutions for debt management in the research countries; and to analyze forecast trends of public debt in Vietnam. In addition, the thesis also used the researched results which were published within Vietnam and in foreign countries relevant to the topic of the thesis.

Due to the figures of government debts not public in detail and sometimes being obsolete, this research is based on the data from a few years ago. As a result, it limited the scope of recommendations given to current public debt management policies. The research met also another barrier of information regarding to debt in Vietnam being unclear and non-unified. It then became a challenge to access up-to-date and reliable information for the topic at hand. However, the work based on data gathered from course materials and publications of the government's departments and international financial organizations, so it is fairly reliable. The inspiration of this research was solutions for an improved public debt management in Vietnam, so the results found were to provide suggestions for the case in this country, or some are running the similar mechanisms to Vietnam. And the proposed solutions can be applied within two years perhaps.

4 DEBT CRISES IN EUROPE AND JAPAN

Recent years have seen the widespread sovereign debt crisis which started from Greece' emerged crisis to other member states in euro zone. Ireland, Portugal, Spain, and Italy had to turn to the EU and IMF for bailout in 2010-2011. Also, Japan is currently facing the problem of public debt over the permitted level (near 200% of GDP), even higher than the proportion of Greek debt. This chapter is studied the crises' causes and consequences and current policy responses in those countries.

4.1 Debt crises in Europe

The European debt crisis started from the second half of 2009 with an increase in the public debt of the GIIPS group (Greece, Ireland, Italy, Portugal, and Spain). Greece was the first country to fall into this spiral, with the budget deficit reached 13.6% of GDP. This was the result of a process of implementing unsustainable fiscal policy to stimulus the economy after the global recession in late 2007. The official figures of the budget deficit and public debt in Greece were a big shock to investors. Although the government launched plans to cut budget deficit of the year 2010 down to 8.7% by reducing public spending and increasing tax from 19 to 21%, investors still doubted the solvency of the country. (Featherstone 2011.)

Entering 2010, the EU and IMF had to come up with a rescue package worth 110 billion Euros to save Greece. Along with the bailout, Greece had to cut more compensation for labor, limit the public sector employees' salaries, and increase value-added tax (VAT) from 21% to 23%. In addition, the government also rose the retirement age from 60 to 65 for men and 55 to 60 for women. (Featherstone 2011.)

Greece's situation sparked off many concerns among investors in countries such as Ireland, Portugal and Spain because they also had a large amount of debts. In November 2010 Ireland officially became the second victim of the debt crisis storm when turning to the EU and IMF for bailout. The nature of the crisis in Ireland was still a serious budget deficit, but the main cause was not the same as Greece. Irish government spent 50 billion Euros to save six major banks of this country in the collapse of the property bubble. This expenditure made the budget deficit up to 32% of GDP. More specifically, the government created a new financial institution, referred to as NAMA (National Asset Management Agency) to turn private debt into public property. (BBC News 2010; O'Carroll, L. & Moya, E. 2010.)

TABLE 3. Public debt and budget deficit of PIIGS 2006-2011 (% of GDP) (Commission 2010; Eurobank EFG 2010; The Economist 2014.)

	2006		**2007**		**2008**		**2009**		**2010**		**2011**	
	Public debt	Deficit	Public debt	Deficit	Public debt	Deficit	Public debt	Deficit	Public debt	Deficit	Public debt	Deficit
Portugal	64.7	-3.9	63.6	-2.6	66.3	-2.8	76.8	-9.4	85.8	-8.5	91.1	-7.9
Ireland	24.9	3.0	25.0	0.1	43.9	-7.3	64.0	14.3	98.6	-32.0		
Italy	106.5	-3.3	103.5	-1.5	106.1	-2.7	115.8	-5.3	118.2	-5.3	118.9	-5.0
Greece	97.8	-3.6	95.7	-5.1	99.2	-7.7	115.1	-13.6	133.3	-8.1	145.1	-7.6
Spain	39.6	2.0	36.2	1.9	39.7	-4.1	53.2	-11.2	64.9	-9.8	72.5	-8.8

Entering 2011, Portugal continued to be a third country plunged into crisis by declaring the budget deficit amounted to 8.5% of GDP, with public debt excess over 90% of GDP. This continued to be the result of inefficient public spending by the national government. In May 2011, the EU and the IMF decided to grant 78 billion Euros to help Portugal out of the crisis, on the condition that this country must have a policy to cut the budget deficit down to 3% in 2013. (BBC News 2011.)

As can be seen on the above table, Italy and Spain’s debt levels, though not really in crisis, were also in dangerous. Italy's budget deficit in 2011 was only around 5% of GDP, but public debt was approximately 120% of GDP. Spain’s public debt was only 72% of GDP but the budget deficit was very high, nearly 9% of GDP.

Causes of debt crisis

The first cause of this crisis was due to the repercussion of the global financial crisis in late 2007 hit strongly on economies in the developed countries. Because of the economic recession, states stimulated the economy by increasing spending and reducing revenues, caused sharp deficits for the government's budgets.

The Greece's policies to stimulate the economic growth did not come with a sustainable fiscal policy and imbalances in the government's borrowings. In this country, since participation in the common currency euro zone in 2001 until the 2008 financial crisis, the budget deficit in each year was about 5% in average, while the number of the entire euro zone was only about 2% (IMF 2009). Therefore, Greece was unable to maintain the prescribed standard indicators of the Economic and Monetary Union (EMU), with ceiling level of budget deficit of 3% and foreign debt of 60%. However, Greece was not the only one case because there were 25 to 27 members of EU not achieved this commitment (Kirkegaard 2009).

The fiscal deficits of the PIIGS countries came from several causes. In Greece revenues were not guaranteed while there were a lot of overspendings. The country was mentioned so much about tax evasion, while nominal GDP growth over the period 2000-2007 averaged 8.25%, the increase in tax revenue was only 7% (Servera & Moschovis 2008). In addition to the common public spending, Greece must also pay for the huge investment from the 2004 Olympic Games. The case of Ireland, as noted above, was due to implementation by the government to save banks, turn banks' bad debts into public debt. In the case of Portugal, it was due to the profligate spending of the government on too many unsustainable projects. (Malkoutzis, N. 2012; Mercier, T. 2013.)

Another cause related to fiscal policy was limitation in mechanisms of operation coordination in the euro zone. The countries in the area mainly cooperate in the monetary policy, in order to maintain the value of the euro, while fiscal policies did not have a consensus and respective harmony. Obviously, despite the specific provisions of the budget deficit and public debt, there was no mechanism for monitoring and managing performance for each member country. Therefore, a default in Greece led to a crisis of confidence spread to other countries with loose fiscal policies. (Armingeon, K. & Baccaro, L. 2011.)

Finally, the lack of coordination among countries in coping with the crisis causes it spreading and becoming more serious. First, severity and risk of the crisis since the beginning were not fully recognized because politicians refused to admit the real situation of the economy. For example, Greece hid the information about its budget deficit. The initial support of the EU was rejected outright, so until Greece formally asked for bailout, the crisis of confidence immediately spread to other member countries. Second, countries in the crisis did not have a common unanimity or consensus in finding causes and developing appropriate rescue policies. Most countries were trying to implement their own policies until coming to defaults and must ask for aid from the EU and IMF. There was no long-term strategy given to solve the problem. (Armingeon, K. & Baccaro, L. 2011.)

Consequences of debt crisis

The first impact of the European debt crisis was the euro slipped continuously against other currencies. This caused severe damage to all member countries in the euro zone. Movements in exchange rates impacted directly on the trade balance because the cost of imported goods increased with the decline of the euro. Furthermore, in addition to receiving aid from the EU and IMF, the country must also use fiscal resources to cope with the crisis, while the repercussion from the global financial crisis in late 2007 were not completely extinguished. Banks and financial institutions are also at risk of bankruptcy if the euro zone is broken. (Oxford Economics 2010.)

The European debt crisis also influenced the group of developing countries. The fall of the euro made exports of these countries declined, leading to economic decline. According to UNESCAP (Table 4), if the euro zone has enforced strict fiscal policies, the growth of the Asia - Pacific region would be only about 6.5% before re-growing in 2013. But in case the euro zone has settled the debt problem ineffectively or even broken up, the growth would be much lower in 2012 and continue to decline in 2013. Regarding inflation, in all scenarios, by 2013, that would not be a major problem for Asia – Pacific region.

TABLE 4. Four scenarios of the Asia - Pacific region for the Euro zone (UNESCAP 2012, 29-31.)

	GDP growth			Inflation		
	2011	2012	2013	2011	2012	2013
Baseline scenario	7.3	6.9	8.0	5.8	4.0	3.4
Strict fiscal discipline scenario	7.3	6.5	7.4	5.8	3.9	2.9
Inefficient solving debt scenario	7.3	5.8	5.1	5.8	3.8	1.4
Euro zone breakup Scenario	7.3	5.1	4.2	5.8	3.4	0.5

The impact of the euro zone crisis in long term was still very difficult to predict, when solving public debt outlook was not actually positive. If the recovery process lasts or continues to spread even more to other countries, the situation would be even more complicated and the euro zone as well as other countries would be increasingly difficult in the recovery after the global financial crisis. The worst case is the euro zone breaks up; this would collapse the confidence of the international economic integration at the regional level as well as the whole world. The economic region with the strong and sustainable developed countries as the euro zone fell in crisis will be difficult for the developing countries and regions to believe in a form of other economical integration. (UNESCAP 2012, 29-31.)

Policy responses

Facing the crisis, the European countries implemented a series of fiscal austerity policies to reduce the budget deficit to less than 3% of GDP and debt below 60% of GDP, beside the direct support from the EU and IMF. EU has no intention of breaking up the euro zone, because it will cause negative consequences to all other countries, not only in Europe but also worldwide. However, to pull the member countries out of the crisis storm is a very difficult and costly problem. In addition to direct supports through the establishment of European Financial Stability Facility, EU required countries themselves to operate policies to reduce the existing current budget deficit. These policies must have straightforward plans and be published in detail. (Nelson et al. 2011, 6-7.)

In Greece, starting from 2010 until now, this country performed continuously five phases of policies making to increase revenue and reduce government spending. Specifically, in the first phase in February 2010, the government decided not to increase government employee salaries, cut allowances by 10%, cut overtime, etc. The

second phase took place only a month later, it was continuous to reduce allowance by 12%, reduce public sector salaries by 7%, increase the value added tax from 19% to 21%, and place more with a range of new taxes. Two months later, another phase of policies was issued. In this time the government reduced pensions, increased the retirement age, and increased the VAT up to 23%. At midyear 2011, it was to continue to cut pension, tax more on the subjects with high incomes and increase in the property tax and other valuable assets. Finally in 2012, the government continued to cut the minimum wage, amend enabling businesses to compete more and laying off more workers, and cut also spending on health care and national defense. It was necessary to cconstantly have new policies to reduce the deficit because when the government implemented the tightened policy, the economic recession did not lead to more revenue or high efficiency of the policy and thereby the government had to continue to make more tightened policies. (Nelson et al. 2010, 6-7.)

Ireland was similar to Greece, implementing a series of policies to cut public spending and trying to increase their revenue. In particular, there was the reduction of the minimum wage, payroll cuts in public institutions, VAT increase, heavy tax on real estate and other high value assets, and a series of type new tax establishment. Other countries such as Portugal, Italy and Spain also had to implement similar policies. In addition, Ireland must also rebuild the banking system. New policies and regulations to monitor and manage the financial and banking system were launched. (Nelson et al. 2010, 12; Sherlock, M. 2012, Armingeon, K. & Baccaro, L. 2011.)

Also, because the indirect effects boosted the crisis from the credit rating agencies (Featherstone 2011), the European Commission (EC) also proposed for stricter rules to monitor the credit rating agencies and promote financial monitoring system in the region. The EC also suggested the establishment of a European independent credit rating agency, and intervene more actively in the common credit rating organizations. (Wickens, M. & Polito, V. 2013.)

4.2 Debt crisis in Japan

Japan had a high level of outstanding public debt and many potential risks. In Figure 4 it can be seen that the ratio of public debt from the mid 1990s has constantly increased and exceeded other developed countries' in the OECD. As of 2010, Japan's public debt was approximately 200% of GDP (OECD Statistics 2012). This level of public debt exceeded, even more than two times the 90% of GDP which economists warn of debt threshold. However, the fact showed that Japan never have to worry

about their debt problems. So what made Greece and other European countries with lower debt levels were in dangerous, while Japan with higher level of public debt is so completely confident about the country's ability to repay? (Euronews 2014.)

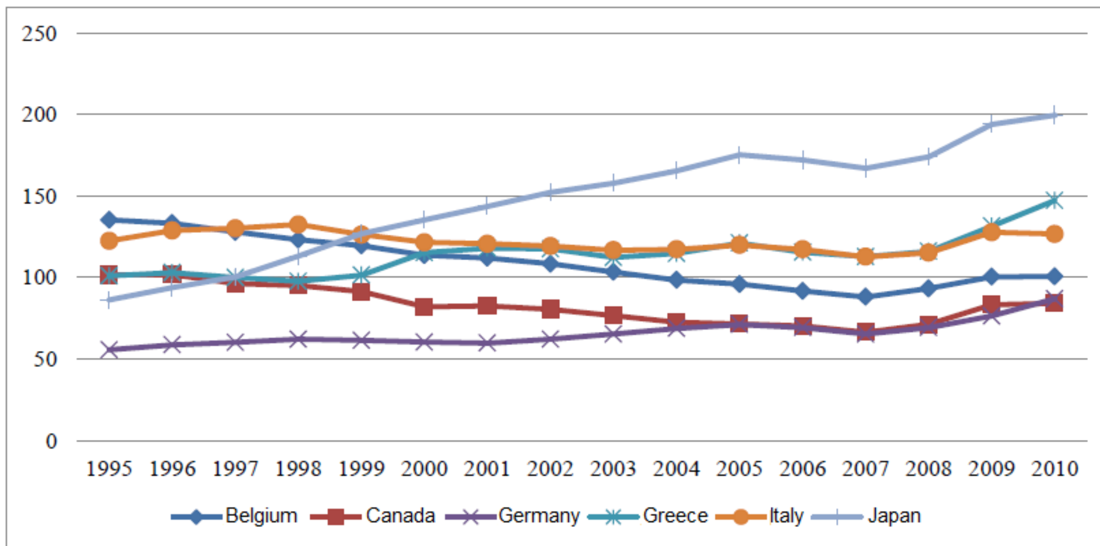

FIGURE 4. Government debt in a number of OECD countries in 1995-2010 (% of GDP) (OECD Statistics 2012.)

The massive volume of Japan's debt stemmed from the increase in the budget deficit since the 1990s when the property bubble began bursting and the country entered a period "Lost decade". After that the global financial crisis with a series of disasters also made the Japanese government print a large amount of money to recover the economic growth. The reasons for the deficit of Japan may include: (1) prolonged recession and the decline of tax revenues; (2) a series of tax cuts in the late 1990s by government; (3) errors in the theory of Keynesian economics relied on state's hand to improve the recovery of the economy; (4) an increase in government spending for social welfare due to the aging population. Therefore, the budget deficit jumped to more than 170% of GDP since only 70% of GDP in 1993. (Yoshino 2008.)

In Figure 5 showed that government spending continuously increased, while tax revenues has gradually declined since the 1990s, and developments in public debt from government bonds. (Ministry of Finance of Japan 2009.)

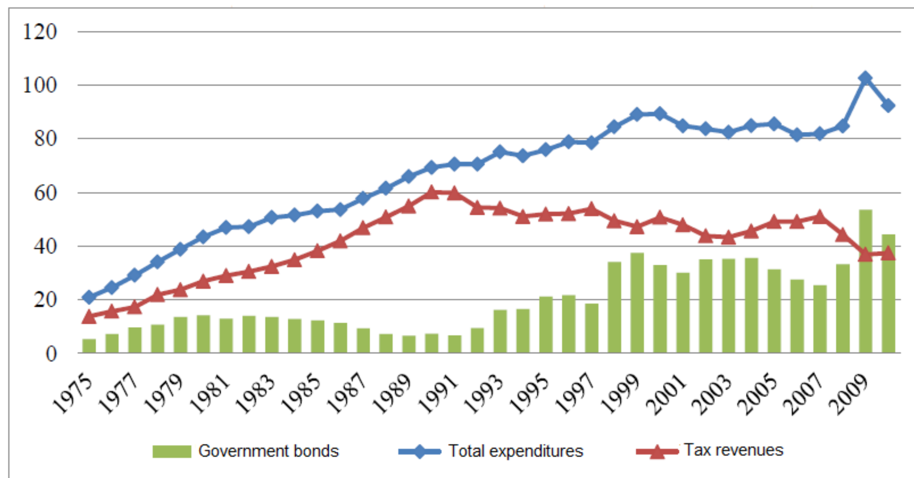

FIGURE 5. Total expenditure, tax revenues and government bonds of Japan 1975-2010 (trillion JPY) (Ministry of Finance of Japan 2009.)

One of the reasons for the safety of Japan's debt was that most of government bonds were hold by domestic investors. According to research by Deutsche Bank (2011), in the developed countries, Japan was a country with the lowest ratio of external debt/public debt, while Greece had the lead in this ratio (Figure 6). (Deustch Bank Research 2011.)

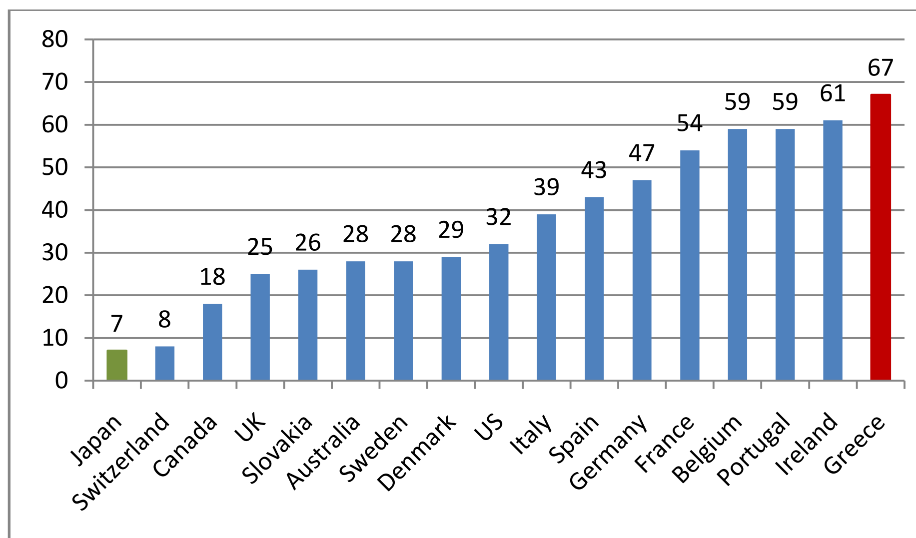

FIGURE 6. The ratio of foreign debt/total debt in developing countries in 2010 (%) (Deustch Bank Research 2011.)

In contrast with the escalation of the Greek bond interest rate since the global financial crisis, interest rates on Japanese bonds maintain stability (Figure 7). Particularly, Japan had the lowest interest rates among developed countries due to the abundant domestic debt through government bonds and a number of national savings. (Societe Generale 2013.)

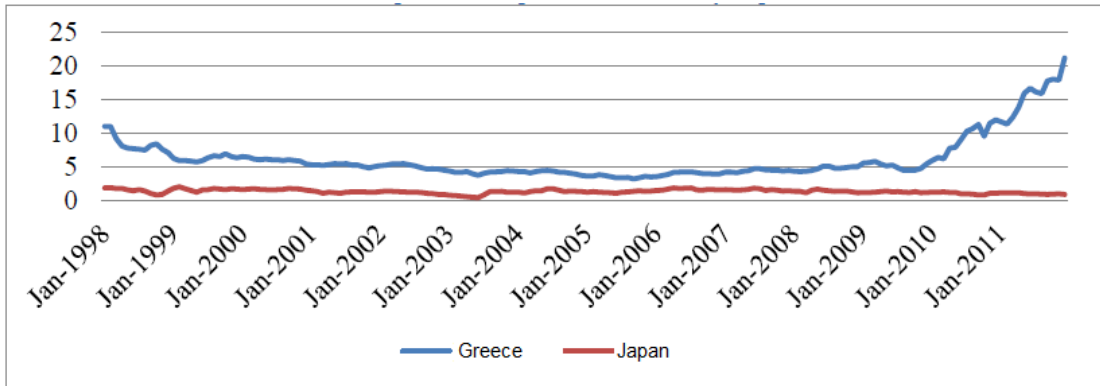

FIGURE 7. Interest rates of government bonds of Japan and Greece in 1998-2011 (%) (OECD Statistics 2012.)

This is explained not only by the stability of inflation and low expected growth (Figure 8) but also by the implementation of the policy of low interest rates. From late 2008, when the global financial crisis started to affect Asia, Japan's central bank has cut overnight call rates (OCR) from 0.5% to 0.3% on October 31st and continued to fall to around 0.1% on December 19th (Vollmer & Bebenroth 2012, 51-77).

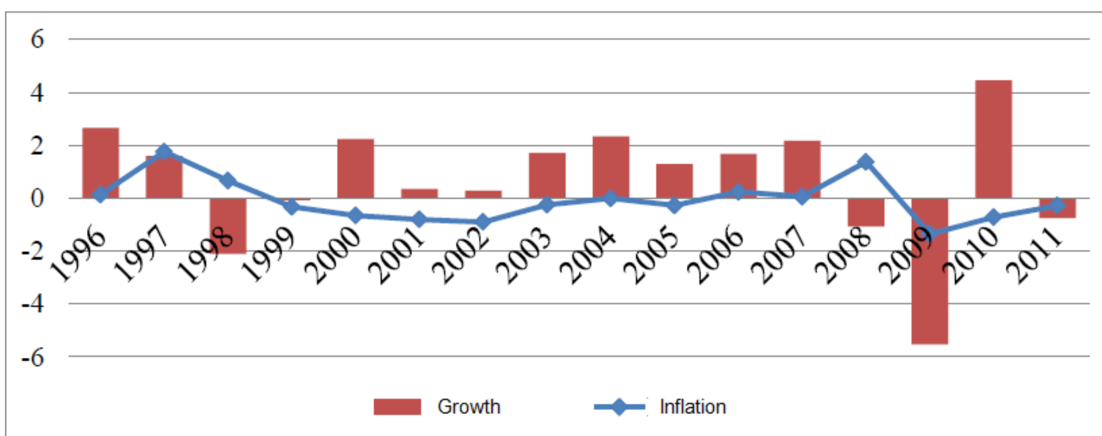

FIGURE 8. Growth and Inflation in Japan in 1996-2001 (%) (OECD Statistics 2012.)

The reason almost all government bonds of Japan were purchased by domestic investors was due to a surplus of capital across the country. In public non-financial in-

stitutions sector always existed outstanding balance (total assets greater than total debt). Meanwhile, the household sector had a large volume of surplus assets. Of these surplus assets, a small portion was deposits and pension and insurance reserves. As reported by the Bank of Tokyo-Mitsubishi UFJ (2011), the amount of direct reserves of household sector was only about JPY33 trillion, accounting for 2.2% of total financial assets. However, the balance sheet of the deposit banks and insurance and pension institutions showed the amount of government bonds was quite large. From those it could be concluded that deposits from households were to invest in the public financial sector through financial institutions.

5 PUBLIC DEBT IN VIETNAM

Entering the era of deeper integration, Vietnam welcomed more opportunities to receive abundant inflows from foreign entities. But beside that, Vietnam's debt also faced many challenges and potential risks derived from either internal or external factors. As a developing country, Vietnam began to concern about the public debt issue, especially after the debt level exceeded permissible levels set by the government of not more than 50% of its GDP in 2009 (Ministry of Finance 2012). This chapter analyzed in detail the current situation of government budget, public debt, and its risks in Vietnam.

5.1 Government revenue

According to the government balance sheets in 2003-2010, Vietnam's budget revenue was stable, ranging from 25-30% of GDP. Total revenue includes taxes and fees, capital revenues, and grants. Of these, the majority still comes from the collection of taxes and fees, capital revenue accounts for about 2% and grants accounts for only about 0.5% (Figure 9).

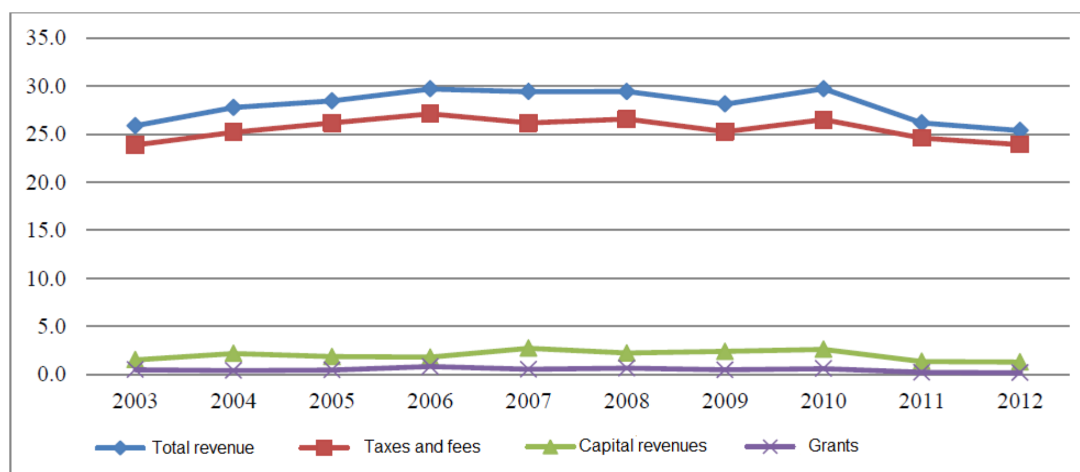

FIGURE 9. Budget revenues in Vietnam in 2003-2012 (% of GDP) (Government Portal; Ministry of Finance 2014.)

In 2009 tax revenue showed signs of a slight decline because the government implemented a series of measures of cutting to stimulate the aggregate demand. However in 2010, the tax rate rised again, up to nearly 30%. According to the budget estimates in 2011 and 2012, the tax rate tended to decrease to only about 25%.

However, the numbers of 2011 and 2012 might not reflect the trend, because if based on total state budget revenues from 2003 to 2010, the settlement figures always exceeded the projected figures. (Ministry of Finance 2014.)

Compared to other countries in Asia, Vietnam was a country with the highest tax rate (Figure 10). China, despite continued increase, only had the rate at about 17-18% of GDP; Thailand or Malaysia at about 15%; Indonesia and the Philippines at about 12%; and India had only about 7%. The high total tax revenue limited the cumulation ability of the enterprise, reduced development investment as well as improved the competitiveness of the private sector. In addition, in spite of the highest level of tax collection in some Asian countries, these tax revenues seemed to be disproportionate to the rate of infrastructure development as well as social welfare. This could create significant barriers to economic development in long term. (ADB 2012.)

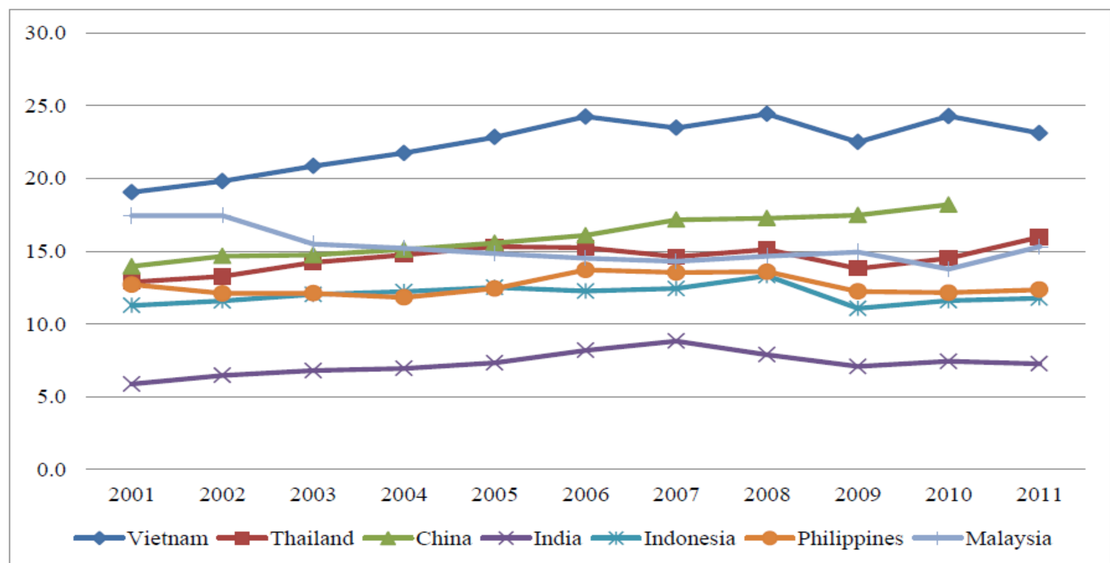

FIGURE 10. Tax revenues in Vietnam and some Asian countries 2001-2012 (% of GDP) (ADB 2012.)

In the structure of revenues in the state budget, revenues from non-state enterprises tended to increase. If based on data of the Ministry of Finance's estimates (2014), revenues from this sector increased by more than double compared to a decade ago, from about 7% in 2003 to 15% in 2012 (Figure 11).

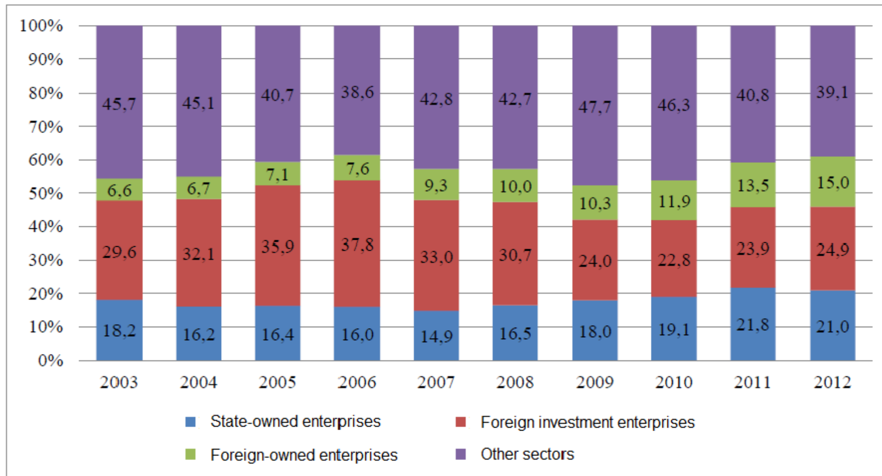

FIGURE 11. Structure of the budget revenue 2003-2012 divided into sectors (% of total revenue) (Ministry of Finance 2014.)

Although the contribution to total revenues of the state budget was increasing, the contribution of this sector to GDP still was much low, nearly 50% (Figure 12). Furthermore, it is paradoxical that more investment but less contribution to revenue was shown in the public sector. Although the contribution of this sector to GDP was about 40%, revenues were only at around 20%. This paradox could be explained by the corruption and tax evasion of businesses in Vietnam. (Pham, A. et al. 2012.)

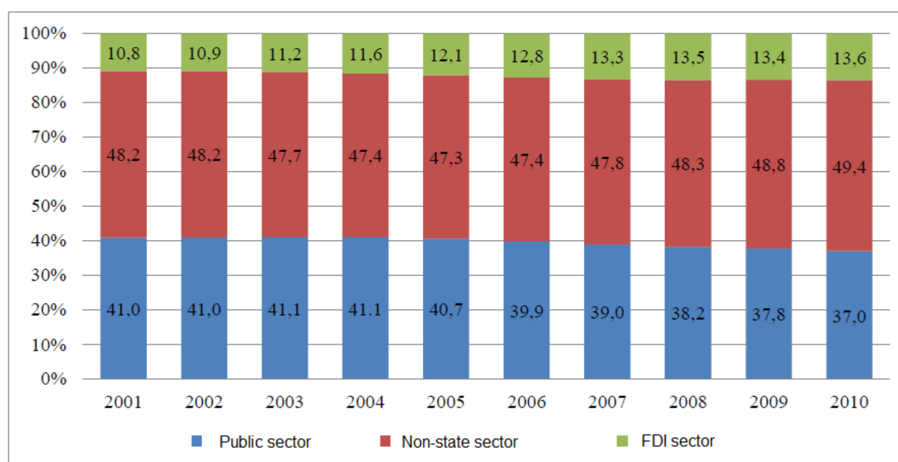

FIGURE 12. Contribution to GDP according to sectors 2001-2010 (%) (General Statistics Office 2012.)

In addition, revenues from the sector of foreign investment businesses was declining, from around 35% in 2005 to approximately 25% of total revenues. In this sector, notably crude oil revenue has declined significantly and was only at about 12% of total revenues (Figure 13). This was a positive sign when the state budget revenues were not much dependent on crude oil as before, and retained stability. (Ministry of Finance 2014.)

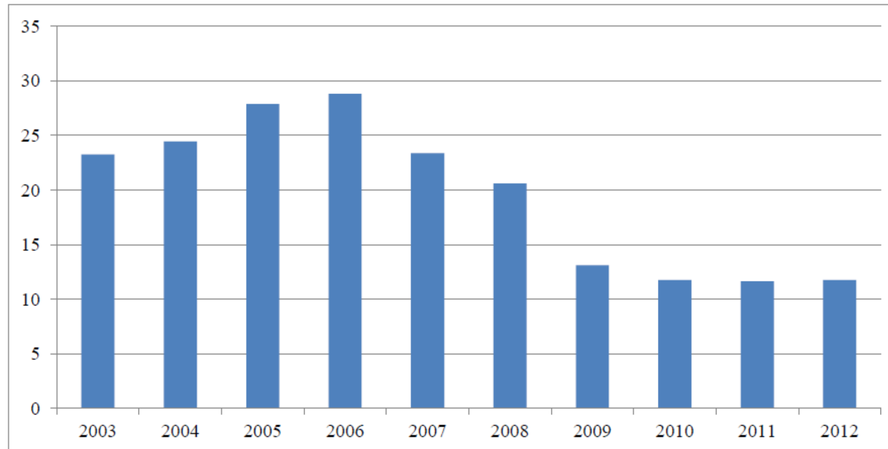

FIGURE 13. Proportion of crude oil revenue (% of total revenue) (Ministry of Finance 2014.)

5.2 Government expenditure

According to the estimates and balance sheets of the Ministry of Finance, total budget expenditures of the state budget includes capital expenditures and current expenditures. Starting from 2009, the total expenditures have decreased by government implementing contractionary policies to stabilize the economy.

However, Figure 14 showed that despite the narrowing of the total expenditures, the current expenditures tended to rise, while capital expenditures inclined to decrease. Obviously this reflected inefficiencies in government spending. The current expenditure increase proved that the government was still to have a cumbersome state apparatus and inefficient operations.

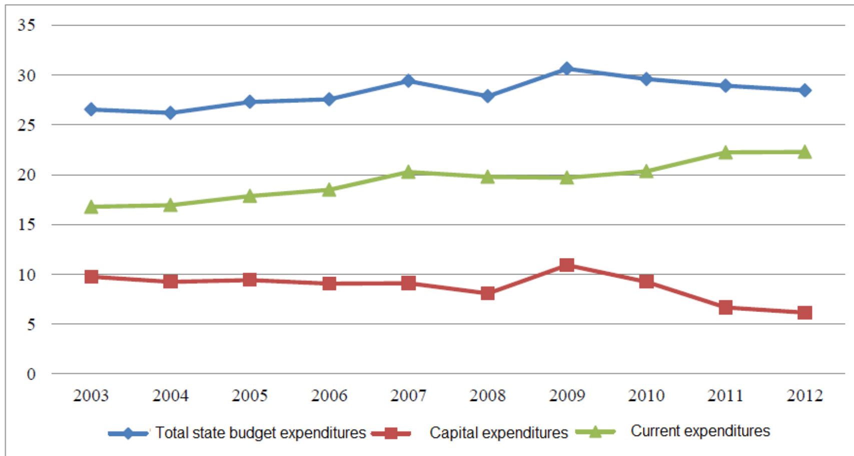

FIGURE 14. Structure of total expenditures (2003-2012) (% of GDP) (Ministry of Finance 2014.)

Figure 15 showed that in comparison to other countries in the region as well as in Asia, Vietnam's public spending was also remarkable, in approximately 30% of GDP. Meanwhile, except in Malaysia and China where the rate was about 25%, other countries as Thailand, Indonesia, Philippines and India this rate was around 15-20%. (ADB 2012.)

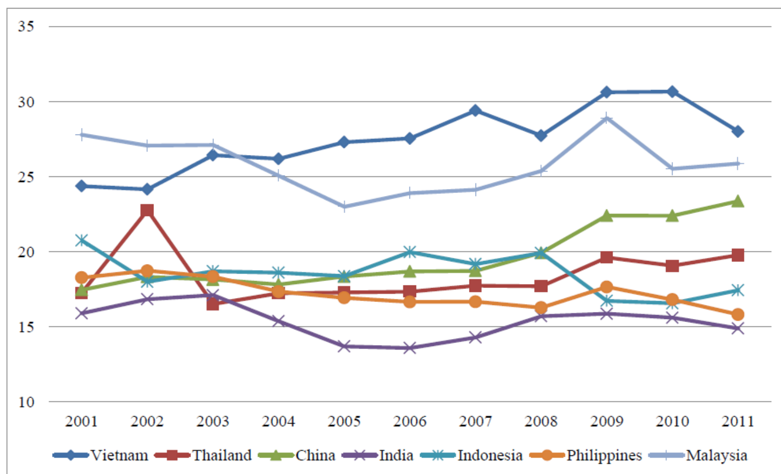

FIGURE 15. Public expenditures in Vietnam and some Asian countries 2001-2011 (% of GDP) (ADB 2012.)

5.3 Budget deficit

Despite the relatively high income, Vietnam could not avoid the frequent budget deficits during the past decade. Balance sheet figures and budget estimates of the Ministry of Finance distinguished two concepts of budget deficit, which are deficits according to international standards (excluding amortization) and Vietnam's standards (including amortization). If calculated according to international standards, the deficit or overspending of Vietnam was much lower, and also quite close to the statistics of the IMF and ADB (Table 5). However as standards of Vietnam, the deficit was around 5% of GDP, only in 2009 Vietnam had significantly higher deficit, which was 6.9% of GDP due to the impact of the global financial crisis. (IMF 2012; ADB 2012.)

Table 5. Budget deficit of Vietnam in 2001-2011 (% of GDP) (IMF 2012; ADB 2012.)

	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
MoF[1]			-1.8	-1.1	-0.9	-0.9	-1.76	-1.81	-3.69	-2.36	-3.14
MoF[2]			-4.9	-4.9	-4.86	-4.99	-5.65	-4.58	-6.9	-5.5	-4.9
IMF	-2.78	-2.35	-3.25	-0.19	-1.31	0.30	-2.18	-0.54	-7.17	-5.19	-2.69
ADB	-3.5	-2.3	-2.2	0.2	-1.1	1.3	-1.0	0.7	-3.9	-4.5	-2.5

Note:

- *MoF[1] – international standards (excluding amortization)*
- *MoF[2] – Vietnam's standards (including amortization)*

The level of budget deficits of Vietnam was high compared to other countries in the region. In the period since the crisis of 2009 (Figure 16), the deficit rate of Vietnam was only lower than Malaysia and India. In 2010, Vietnam was the only country that continued to increase the budget deficit, while other countries have started to improve their situation. However in 2011, according to the general trend, Vietnam has halved the budget deficit. This could be explained by the economy tended to recover and return to stability after the global financial crisis. (ADB 2012.)

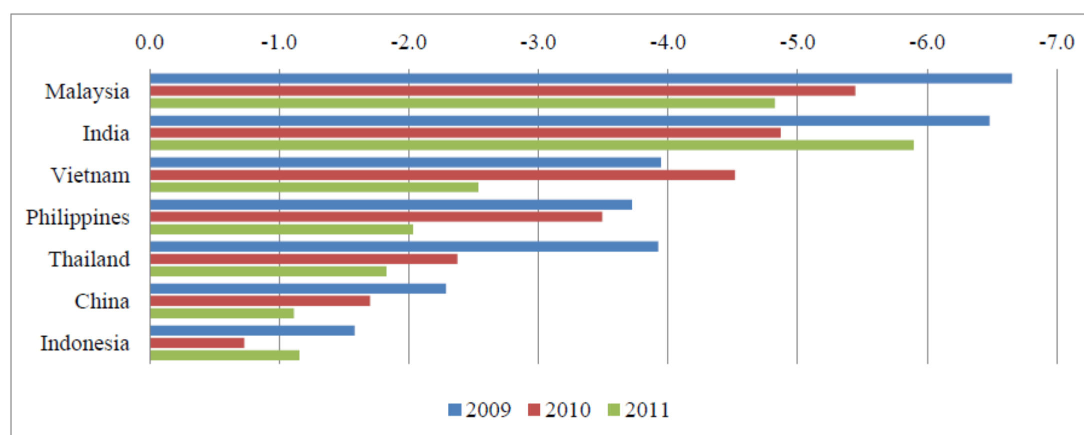

FIGURE 16. Deficit in Vietnam and some Asian countries 2009-2011 (% of GDP) (ADB 2012.)

Data from the Ministry of Finance also indicated sources to finance Vietnam's state budget deficit, including domestic borrowing and foreign loans (Table 6 and Table 7). Accordingly, Vietnam typically depended on domestic loans, rather than foreign loans. Except for 2009, Vietnam borrowed fairly much foreign debt to offset for the deficit. (Ministry of Finance 2014.)

TABLE 6. Structure of sources to offset the state budget deficit 2006-2011 according to the International standard (including amortization) (billion VND) (Ministry of Finance 2014.)

	2006	**2007**	**2008**	**2009**	**2010**	**2011**
Domestic debt	3 160	13 315	11 710	30 860	63 100	55 050
Foreign debt	5 804	6 779	15 037	30 338	11 270	16 310
Total	8 964	20 094	26 746	61 198	74 370	71 360

TABLE 7. Structure of sources to offset the state budget deficit 2006-2011 according to the Vietnam's standard (excluding amortization) (billion VND) (Ministry of Finance 2014.)

	2006	**2007**	**2008**	**2009**	**2010**	**2011**
Domestic debt	35 864	51 572	48 009	78 150	98 700	92600
Foreign debt	12 749	12 995	19 668	36 292	21 000	28 000
Total	48 613	64 567	67 677	114 442	119 700	120 600

5.4 Public debt

About Vietnam's public debt issues, difficulties existed in making a specific measurement. According to statistics of Pham The Anh (2012) in Figure 17, the total debt of Vietnam as of the end of 2011 was around 55% of GDP, of which 31% was external debt and 24% was domestic debt. As recommended by Caner, Grennes and Koehler-Geib (2011), the threshold of public debt for developing countries like Vietnam was 64%. Thereby, Vietnam's public debt was close to the threshold, and perhaps up to the present time has passed the dangerous level. It seemed that the government might use more state budget to repay. In addition, the domestic debt of SOEs sector according to the Restructuring in SOE project of Ministry of Finance (2012) also accounted for 16.5% of GDP.

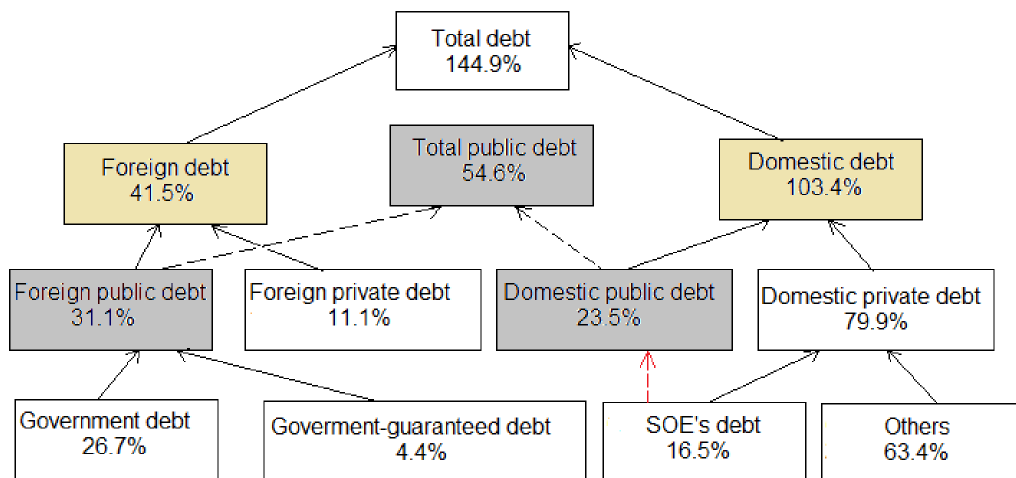

FIGURE 17. Vietnam's debt structure as of the end of 2011 (% GDP) (Pham, A. et al. 2012.)

According to the latest report of the Minister Vuong Dinh Hue sent to the Government in October 2012, the public debt of Vietnam could be described in the Table 8. In accordance with international definitions, Vietnam's public debt exceeded all the thresholds mentioned above. However, this calculation has still not included debts of the public financial sector in the public sector graph of the IMF. In other words, if including debts of the central bank and other financial institutions, Vietnam's public debt would exceed 106% of GDP. This level exceed far over the threshold mentioned above, even, it was almost double the 64% of GDP threshold that Caner, Grennes and Koehler-Geib (2011) put out. (Ministry of Finance 2013; Bich, D. 2013.)

TABLE 8. Public debt as Vietnam's definition and International definitions (latest data) (Ministry of Finance 2013; Bich, D. 2013.)

	Billion	**% of GDP**
Public debt according to Vietnam's definition	**1 391 478**	**55%**
Government debt	1 095 654	43.1%
Government-guaranteed debt	285 124	11.3%
Local administrations debt	19 699	0.6%
Public debt according to international definition	**2 683 878**	**106%**
Public debt according to Vietnam's definition	1 391 478	55%
SOE's debt	1 292 400	51%

Based on The Global Debt Clock of The Economist about Vietnam's public debt from 2001 to present, as illustrated in Figure 18, the public debt of Vietnam continuously increased until 2010 and also surpassed the threshold of 50% of GDP. However, as the official data in 2011 along with forecast figures for the year 2012 and 2013 it can be seen that Vietnam's total outstanding debt tended to decline. Specifically, The Economist believed that Vietnam's public debt in 2012 would be around 50% and in 2013 continue to drop to 48.7% of GDP. (The Economist 2014.)

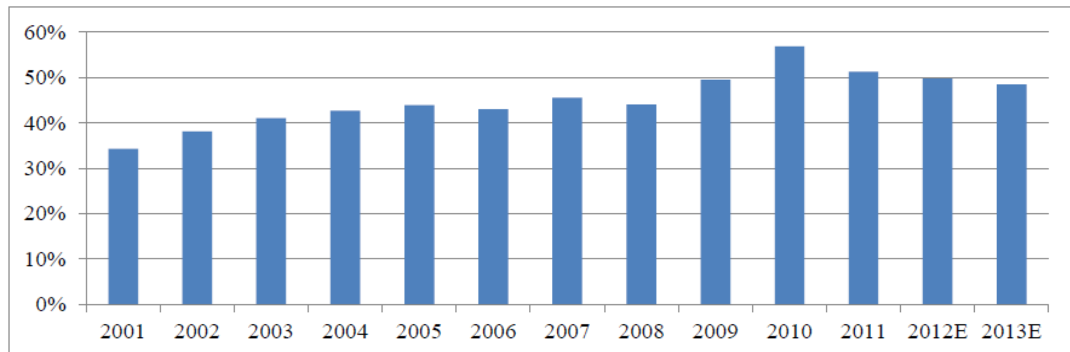

FIGURE 18. Total public debt of Vietnam in 2001-2013 (% of GDP) (The Economist 2014.)

In total public debt of Vietnam the foreign debt was the most concern for the government. Beginning in 2007, the Ministry of Finance released the "Annual foreign debt newsletter" and relevant data. In the Figure 19 it can be seen most of the foreign debt was public debt, which foreign debt ranged from 25-30% of GDP. (Ministry of Finance 2014.)

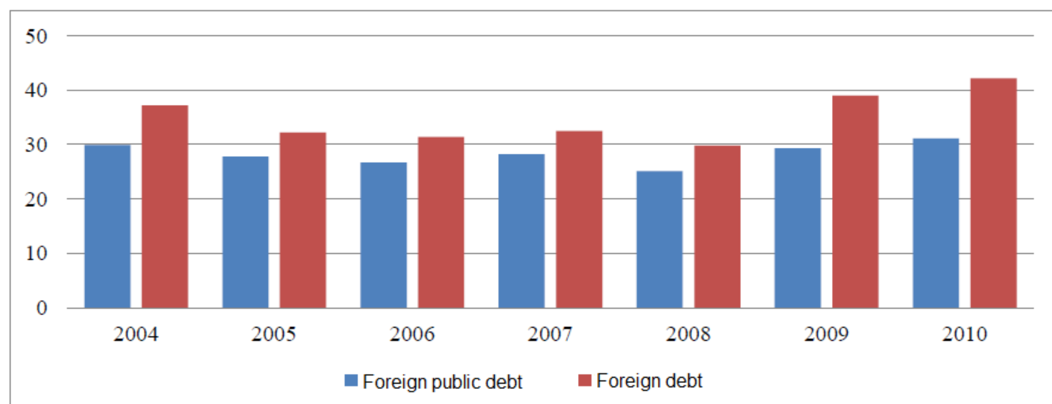

FIGURE 19. The foreign public debt and total foreign debt of Vietnam 2004-2010 (% of GDP) (Ministry of Finance 2014.)

Of the total foreign public debt of Vietnam, apart from IMF loans, the majority of the foreign debt of Vietnam derived from the three major currencies, which were Euro, USD and JPY (Figure 20). All three currencies tended to increase as the recovery rates of the global economy was a concern for Vietnam when the debt value would also rise up. (Ministry of Finance 2014.)

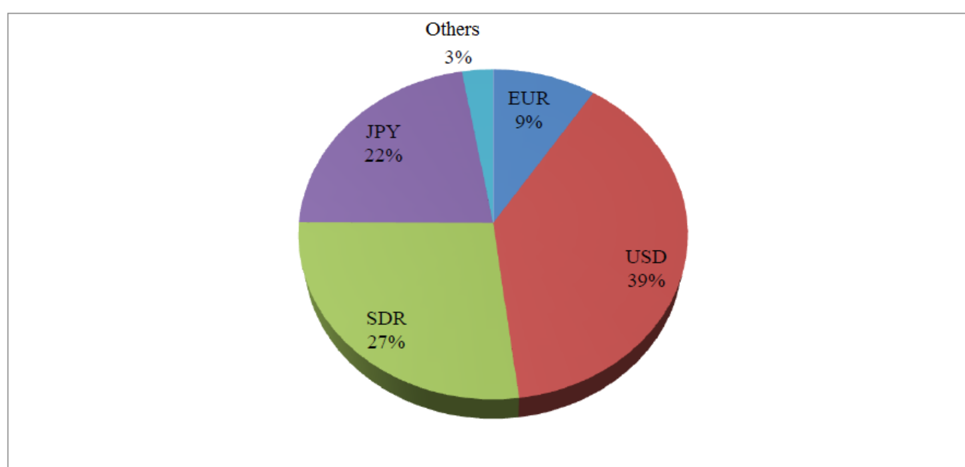

FIGURE 20. The structure of the foreign debt of Vietnam in 2010 by currency (Ministry of Finance 2014.)

5.5 Vietnam's public debt risks

To pay for the debt, the government must have a stable source of income unless cutting spending. However, the reality seemed that increasing revenue by direct taxes from businesses or people had many difficulties from the discouragement of the people, lead to social unrest. For example, recently the Ministry of Transport suggested collecting more road taxes, which has received a lot of public opposition. If tightening spending, the government might have exchanged for the economic growth slowdown because the target stimulus could not be done as before. (Voth, J. 2013.)

Besides the intrinsic difficulties, Vietnam, like many other countries around the world, was affected by the global financial crisis. Vietnam dong devaluation generally pushed the value of foreign debt of Vietnam up. Also, investors no longer saw Vietnam as an attractive destination as before. Although the currency devaluation could increase exports and trade balance, this positive effect was not great because Vietnam only exported crude goods with low prices. (Pham, A. 2011.)

All those impacts were the reason Vietnam could no longer count on the foreign debt. The European debt crisis did not only lessen the confidence of investors, but also

raised wake-up call for developing countries, even the strong growth in euro area could also collapsed, the developing countries had to be more vigilant over their debts. Thus, with a limit and unable-to-increase foreign loan, Vietnam would have to use effectively for the right purpose to promote the development of entire economy to repay debts in future and restore investor confidence. (Pham, A. 2011.)

Since Vietnam has focused on the disbursement of their loans, trying to sell bonds to collect money, while the effectiveness of capital investments were rarely considered as success. This "chronic disease" in Vietnam came from bureaucracy and corruption with the unreasonable use of public funds, spreading nature, delays, losses and large waste together with loose management led to the fact that used funds did not bring the expected results. Typically these might be mentioned the cases of large state-owned corporations as Vinashin, Vinalines or Petro Vietnam. Losses from these corporations amounted to tens of trillions Vietnam dong. Therefore, fiscal risks and Vietnam's public debt became more severe when these groups would hardly revive and repay the loan their own debts. (Pham, A. 2011; Huan, D. 2013.)

Investment efficiency in Vietnam was shown obviously through ICOR (Incremental Capital Output Ratio), showing a decline of efficiency of Vietnam's investment not only in the public sector but also in the entire economy. From Figure 21, the efficiency of investment in Vietnam significantly declined. In terms of the entire economy, the ICOR increased from 4.89 up to 7.43 from 2000-2005 to 2006-2010. (General Statistics Office 2012.)

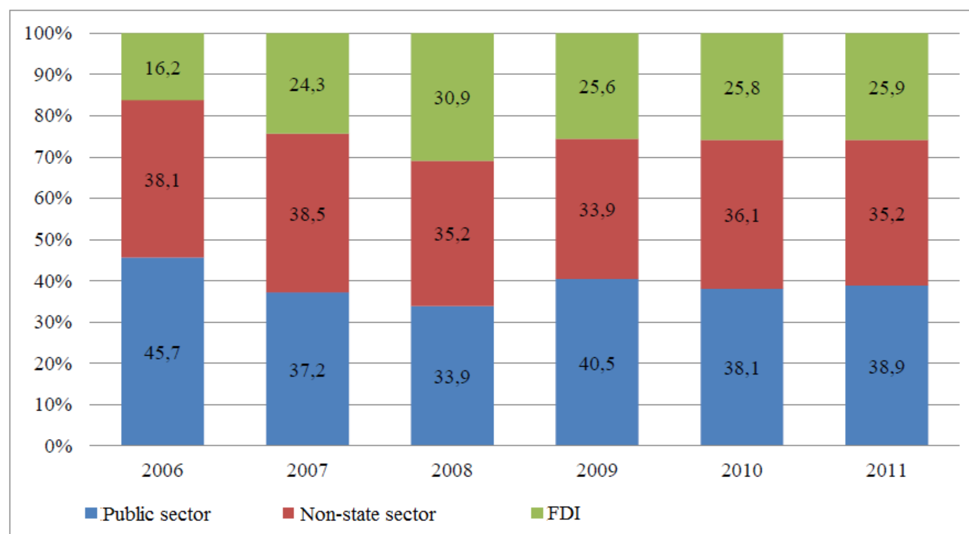

FIGURE 21. Density social investment by the sector 2006-2011 (%) (General Statistics Office 2012.)

But in comparison of the efficiency between the public sector and the non-state sector could easily find the paradox. While the public sector always received more investment proportion (Figure 22), the ICOR was more than double. Specifically, in the 2000-2005 period, while non-state area just needed about 3 dong in capital (currency in Vietnam) to generate 1 dong in revenue, the state sector needed in average nearly 7 dong. (Bui, T. 2011.)

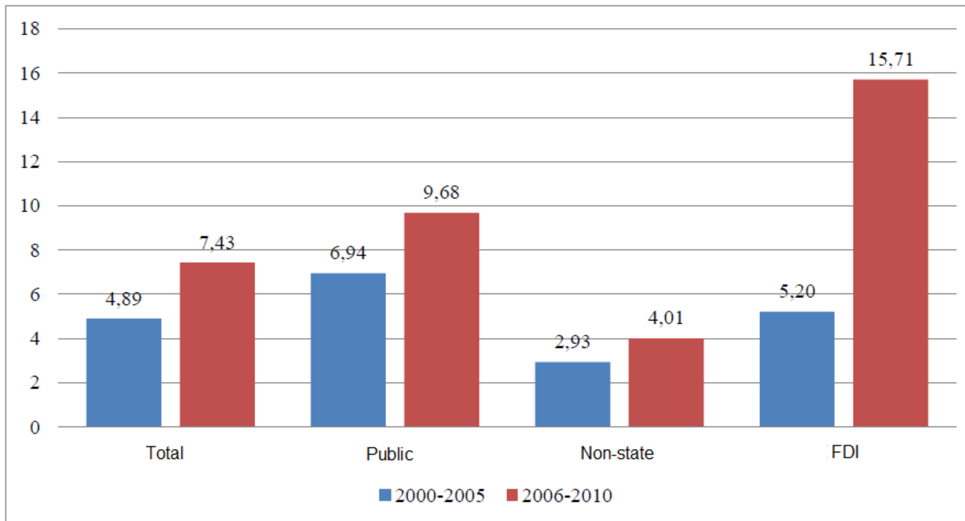

FIGURE 22. Vietnam's ICOR by the sector (Bui, T. 2011.)

6 CONCLUSION

Understanding from the theoretical part, public debt is a two-sided matter. On one hand, it is a very important and necessary resource to develop the economy; on the other hand, it can bring negative effects and even serious impacts on the economy.

Recent years have witnessed the transformation of the global financial crisis in 2008 into a sovereign debt crisis in the euro zone. Starting in 2009, Greece government disclosed the country's deficit and asked for financial aid package from the EU and IMF. November 2010 Ireland became the next country in this region sought for and obtained the bailout of 85 billion Euros. The other countries in the group PIIGS which are Portugal, Ireland, Italy and Spain were in difficult with the debt crisis developments.

In Japan the consequences of the global financial crisis, domestic economic recession, successive natural disasters, and aging population made tax revenues decline and budget deficits increase. As a result, Japan has the highest debt ratio in the group of developed countries in the world. The public debt of this country accounted for over 200% of GDP in 2009-2010, and is expected to continue increase in the coming years.

Lessons from the crises in Europe and Japan

The first lesson is about fiscal policy and public debt management. One of the common points in the real situation of the Greece and Vietnam's economies is the prolonged deficit. Hence, it is necessary to tighten fiscal policy and manage expenditure and save more reasonably in the future to curb the budget deficit. The government is required to have a prudent public debt management policy and a sound borrowing plan to reduce public debt risks.

Second, the lesson is about public investment and efficient use of capital. Because of easily accessing to foreign capital, Greece used its capital in an arbitrary way, leading to ineffective and non-profit. Thus, there was no money left to pay the debt. Athens stadium was evidence, though spending a huge amount of money, besides using for the Olympic Games in 2004 once; this work hardly brought any profits for Greece. Therefore, it is required to consider carefully and plan projects and programs rea-

sonably and specifically to ensure that investment capital is used with maximum efficiency.

The third lesson refers to transparency and investors’ confidence. After the real facts and figures of the budget deficit were exposed, several investors quickly withdrew their capital from the Greek banks. This pushed the country into a difficult situation. Thus, transparency and disclosure is always required by both domestic and foreign investors.

Besides, the state needs a close monitoring and timely intervention to the banking system and large corporations because those organizations’ disruption creates tremendous damaging effects on the economy. As findings above, the situation of the Irish debt crisis stemmed from the government did not timely controlled irresponsible lending of banks. As a result, the government was forced to subsidize those banks when they got lost.

Finally, dependence on external capital sources makes the economy weaker. Greece relied too heavily on external borrowings to cover deficits of the country’s budget as well as to meet the needs of public expenditures. Therefore, when it was risky to access to these foreign capital sources, the economy became too weak or not strong enough to recover debts itself. Meanwhile the major of Japan's public debt was in the hands of domestic investors in the form of government bonds (about 95% of the country's public debt is held by domestic investors). Less depending on external investment capital, Japan could avoid more harmful effects of the fluctuations of the international financial market.

Suggested solutions for Vietnam

The Vietnam’s public debt analysis showed that Vietnam had many signs similar to some European countries, which fell into the debt crisis, namely: (1) a reduction in economic growth since the U.S. financial crisis in 2008; (2) huge and increasing budget deficit and public debt; (3) high inflation; (4) an increase in foreign debt but decline in foreign exchange reserves/total short term loans; (5) large debt of state enterprise sector, but not included in the structure of public debt; (6) inability to borrow preferential interest rates loans but higher interest rates and shorter term commercial loans. These factors made Vietnam's sovereign debt in high risk area, especially when the economy continued growing based on the exploitation of natural re-

sources, labour and capital intensive, low labour productivity. So far, Vietnam’s public debt exceeded the threshold, in the next few years it is increasing and unsustainable.

First, high foreign debt, budget deficit, and overspending referred to the main causes of the debt crises of the economies. Therefore, it is necessary to come up with increasing revenues and cutting public spending. Although Vietnam’s budget income is quite high in comparison with other countries in the area, the budget deficit is still prolonged. This is due to the high level of public spending that was largely spent on current expenditures but capital expenditures. Therefore, if it is possible to cut and reallocate the current expenditures effectively, in particular to reduce the cumbersome administrative mechanism which is a burden of the economy. Thereby Vietnam will completely offset the budget deficit.

The measures to increase budget revenues are raising taxes, adding more new taxes, heavily taxing on subjects with high incomes, and increasing tax on properties or high value assets. Currently Vietnam is not in crisis as the European countries. Therefore, the austerity fiscal policy should be applied carefully to avoid the reaction of public opinion as well as social unrest.

Second, one of the big problems is that Vietnam's public debt and public investment brought inefficiency and inessential benefits, leading to losses and serious impacts on the economy. A chain of large corporations declared bankruptcy caused psychological concerns to domestic as well as foreign investors. As a consequence, the government must generate more public spending to pay those bad debts, and lead to more serious budget deficit. Therefore, the restructuring of the SOE system should be a top priority in improving the situation of Vietnam's public debt. The issues of restructuring to improve the efficiency of public investment are also important, particularly as analyzed in the economic nature of the budget deficit and public debt, which is the effect of public investment crowding out private investment. This is appropriate to Vietnam when investment efficiency in public sector was only half of the efficiency of investment in non-state sector.

Third, in order to better the budget deficit and public debt management, the important task of each country is to make these issues disclosed and transparent. Thereby, the government sector should be clearly separated from the public organization sector. In addition, all fiscal activities related to the state budget are also reported clearly and transparently.

Regarding the management of public debt, the government should also provide an unequivocal legal governance framework and assign responsibilities to a specialized agency for choosing necessary tools and forms of borrowing, building strategy and process of reasonable borrowing, and researching on the strategy of public debt management through figures of debt thresholds and indicators of debt risks. Simultaneously the agency should establish a department in charge of monitoring to provide the updated and accurate statistics figures.

Finally, Vietnam as well as many other developing countries, is facing the original sin problem, foreign borrowing by strong currency. However, since Vietnam became an average-income country, it was difficult to continue to receive ODA loans with preferential interest rates. The country has to borrow foreign loans with high interest rates. As the risks of foreign debt were mentioned above, consequently, the development of domestic debt market plays an important role in investment capital market in Vietnam. Different from Japan, the government bond market in Vietnam has not really developed to attract more domestic investors. Japan has been very successful in developing government bond market, with the majority of citizens' savings. To implement, Vietnam should have specific strategies for market development, along with the rise of domestic financial markets.

To sum up, the status of public debt in Vietnam is well within safety limits, not in the debt crisis in at least next ten years. The monitoring indicators of debt remains within safe levels, only total debt exceeded the permitted level of 50% of GDP, so the Government had taken several measures to reduce public debt over time. However, from the perspective of the research, the issue to consider is not just to cut public debt in terms of quantity, but pay special attention to the improvement of quality in the mobilization and use of debt towards building a mechanism for more sustainable and efficient debt management, thus creating strong motivation to promote economic development.

From the study of the experience of other countries in the world, especially from the debt crisis, Vietnam could draw many useful lessons to apply to the management mechanisms. A general experience from the researched cases above showed that fiscal adjustment is essential but insufficient. It is also important to foster domestic savings and get people to purchase the government bond instead of investing their money abroad.

The research work faced problems that the public data on public debt were very short and lacking of specific sources. Regarding the important data on external debt, the

most reliable source was taken from the foreign debt bulletins of the Ministry of Finance in the past few years. However, this bulletin is for purely statistical, not provides the necessary information about the risks of Vietnam, particularly estimates for next year was not given, as the state budget estimates. In addition, this bulletin does not seem to be updated frequently; evidence is that in the beginning of 2014 the newest bulletin found reflected the 2012 data. Because of the lack of estimates for next year in the bulletin of 2012, up to the present time no data can be trusted on Vietnam's foreign debt in 2013. Therefore, the findings of this research are only valid for the case country – Vietnam in near future (until 2016 perhaps). It should be developed to apply for further years.

Due to limited resources in terms of time and reference materials on public debt management policies, the work was to analyze only two cases of Europe and Japan in general. Although the ratios of public debt to GDP of those countries were very high, there were big differences between their debt statuses and management policies.

In further the research can study specifically many other countries such as Greece (the typical example for debt crisis), UK or Germany (the countries with strong financial growth), Argentina (a country experiencing debt crisis), Thailand or China (the countries have more or less similar points on the development with Vietnam). Or the topic can synthesize also the major debt crises in history to provide an overview of both the theory and practice of public debt. Another recommendation for further research is to use more measures of public debts instead of some common indicators to specify more explicitly the real situation and challenges of the researched countries.

Working on the thesis topic gave the author a valuable opportunity to get a deeper understanding of public debt issue and its effectiveness and importance which is in relation to macroeconomics and public finance fields. A lot and a variety course books and online documents were learnt to build the theoretical framework. The literature helped the author to gain more knowledge about public debt and the related concepts. Besides the analysis of the current situation of European countries and Japan's debt proved that public debt management is pressing and necessary issues in Vietnam. The author felt strong motivation to do this research because of its contribution to strengthen the state budget management in the home country. In terms of knowledge and published data, the researcher only stated the solution at the macro level and generally because this field is so broad and covers many other macro fac-

tors of the economy. However, it is attempted to concretize the recommendations by the examples and some of the methods that are being used in many countries around the world, intended to give the insight and new ideas in public debt issues in Vietnam in general, and the management of public debt in particular. In further, the work can be done by selecting more countries to analyze the debt issues or conducted by the timeline of debt crisis.

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