

Budget Deficit And National Debt

TRẦN NGỌC ANH KHOA & NGUYỄN TRẦN XUÂN NGHĨA

The study of budget deficits and national debt has been an active field of research in the assessment of economic performance, particularly, European countries. An explanation of definition of national debt and budget deficits has been expressed in this project. National debt (or government debt or public debt) is the total value of money which government borrowed from all levels in the country from central to local government. The purpose of this action is to refinance for budget deficits, in other words, government debt is the accumulated deficits to a point. In addition, to visualize the size of national debt easily, it is often measured by the percentage of gross domestic product (GDP). Throughout this project, audiences can find out how to clarify the differences and linkages between budget deficits and public debt. Moreover, based on some economist theories, a comprehensive summary of Portugal's economy after credit crunch 2008/2009 has been provided, so that a wide range of implication of these values to the economic performance was identified.

Keywords: Budget deficit, economic performance, national debt, GDP, Portugal's economy.

1. Introduction

The Credit Crunch 2008/2009 caused economic panic throughout the global economy such as in the Euro zone, which was becoming a sensitive situation early in 2010 because of rising debt levels. It continued to pile up on the shoulders of European Nations the burden of national debt (public debt or government debt).

So far, public debt has exceeded a higher safe level in developed economies, is becoming a hot topic because it is a high risk factor that threatened signs of recovery of the global economy. The debt crisis in European countries is now considered as the epicenter of the debt crisis. This may highly influence European countries and potentially spread to many other countries worldwide. Therefore, further investigation on the government debt of these countries

is actually needed. This project will clearly indicate what the budget deficits and national debt is respectively, and a comprehensive view on the relationship between national debt and budget deficit, also an example of Portugal has been used to illustrate the implications of these values for economic performance.

2. The concepts of budget deficit and national debt

William and Alan state that, "the national debt, also called the public debt, is the total value of the government's indebtedness at a moment in time" (1994, pp.796). This is a debt that the government produces by borrowing from domestic lenders (by issues treasury bills, construction bonds...). In addition, debt is also incurred by borrowing from foreign lenders (ODA – Official Development Assistance, IMF, issues

international bonds). Generally speaking, the total value of money that the government borrows to cover the budget deficits is known as national debt.

According to Michael, "the government's budget balance is equal to its tax revenues minus its expenditures. If expenditures exceed tax revenues, the government has a budget deficit" (2003, pp.518). Thus, government debt, in other words, the budget deficit accumulated to a certain point and is commonly measured by how much the percentage of the total Gross Domestic Product (GDP) is.

The concepts of budget deficit and national debt are closely related. The example below will explain the relationship between the budget deficit and national debt by a simple analogy. In a year, the government spends £6.000

but only earns £5.000 so the extra of £1.000 is seen as budget deficit. This amount of money is borrowed by the government from internal organizations or external governments in order to finance for budget deficit, then, it leads to £1.000 national debt. This problem continues to repeat again in the next year (spend £1.000 more than earning), thus, once again the country has £1.000 budget deficit and £2.000 national debt. If these remain in the next five years, the country would have £1.000 deficit per year and the debt at the end of fifth year would be £5.000. Consequently, the total amount of borrowing money which added every year at a certain time is seen as national debt.

As the example above, it is clear that the difference of the two values – budget deficit and national debt is timing. Unlike the budget deficit is created by comparing the government expenditure and its earning during a single year, the accumulation of budget deficits in every year is the national debt.

The explanation about the concepts of Budgetary Deficit and National Debt has been clarified throughout their definition, differences and linkages. The rest of this project will indicate how these values impact on economic performance by exploring Portugal economy – one of the three threatened countries in European zone about National Debt.

3. Overview of Portugal's economy

Since joining the European Union (EU) in 1986, Portugal's economy has grown more diverse and mainly oriented to the service sector. Portugal was eligible to

join the European Monetary Union (EMU), and on 1st January 2002, Portugal as well as 11 other European countries, Euro monetary currency exchange was used instead of Portuguese escudo. (OECD, 2010)

Portugal has the lowest growth rate in EU and an unstable financial health. Unlike Ireland and Greece, the economic difficulty that Portugal incurred was formed decades ago, when the five year economic growth averaged only 5-6% in the period 2003-2008 (compared to 20.7-22.8% of Greece and Ireland), but Portugal was paying welfare expense the same or equivalent to the rich and high growth rate of other European countries (UNESCO, 2010). Financial position of Portugal becomes unstable since 2005 when it first exceeded the debt limit allowed under EU rules for its members (table 1 below). In the past, Portugal had to call on the support from international community

three times. The first time was in 1978, when budget deficit reached 10% of GDP. International Monetary Fund (IMF) forced the Lisbon government to devalue the escudo to more than 27% to revive the export sector. The second time was in 1983, when Portugal had to deal with galloping inflation (34%/year), unemployment rate was at recorded level (8.8% in 1985), the purchasing power parity (PPP) of customer dropped by 18% (New York Times, 2011). The third time was in 2011, Portugal was forced to request a bailout package from EU and IMF after almost a year of trying to solve its own economic problem and failed. (Joao et al, 2011)

As can be seen from the table 1, government debt of Portugal had increased continuously both volume and percentage of GDP from period 1998 to 2011. Portugal's national debt has grown from €161,257 million (2010), equivalent to 93.3% GDP, higher

Table 1: Portugal's Debt and Deficit

Portugal: Evolution of Debt			
	Million €	% GDP	€ Per Capita
2011	€ 184,291	107.80%	
2010	€ 161,257	93.30%	€ 15,115
2009	€ 139,945	83.00%	€ 13,197
2008	€ 123,108	71.60%	€ 11,599
2007	€ 115,587	68.30%	€ 10,928
2006	€ 102,441	63.90%	€ 9,649
2005	€ 96,469	62.80%	€ 9,169
2004	€ 85,794	57.60%	€ 8,179
2003	€ 79,914	55.90%	€ 7,658
2002	€ 75,456	53.80%	€ 7,263
2001	€ 68,672	51.20%	€ 6,656
2000	€ 61,569	48.50%	€ 6,014
1999	€ 58,657	49.60%	€ 5,754
1998	€ 55,489	50.40%	€ 5,443

Portugal: Evolution of the deficit		
	Million €	% GDP
2011	€ 7,262.50	-4.20%
2010	€ 16,863.50	-9.80%
2009	€ 15,700.90	-9.30%
2008	€ 5,037.70	-2.90%
2007	€ 4,671.20	-2.80%
2006	€ 6,491.30	-4.10%
2005	€ 9,101.60	-5.90%
2004	€ 5,026.60	-3.40%
2003	€ 4,321.00	-3.00%
2002	€ 4,057.60	-2.90%
2001	€ 5,730.30	-4.30%
2000	€ 3,670.20	-2.90%
1999	€ 3,189.00	-2.70%
1998	€ 3,814.90	-3.50%

(Source: Datosmacro, 2012)

than the debt limit allowed under EU rules for European area (60% GDP), and up to €184,291 million (107.8% GDP in 2011). Public debt increased while the economy was in recession, and unemployment rate rose by 14.7% - the highest rate in 10 years (Datosmacro, 2012). The most suitable method to eliminate this spiraling downward cycle is to increase export activity. However, export policy encountered into problem with accessing capital limitation, and difficulty in borrowing conditions.

4. Implication of Budgetary Deficits and National Debt on economic performance

Discussing the impact of budget deficit and national debt on the economy, there exist many different views, including two key points: the traditional view, represented as Keynesian economists (cited in Douglas, 1998) said: When the government debt to cover for the deficit by cutting tax revenues while public spending do not change, it will affect people's consumption behavior. Specifically, consumption will increase, thereby, increase the total demand for goods and services, increase outputs and employment in short term. However, in long term, this method will reduce national savings and is accompanied by other implications. The views of David Ricardo, a British economist (1772-1832) said that cutting tax which is offset by government debt will not affect consumption as traditional view of debt, including in the short term (cited in Douglas, 1998). In contrast, it will increase private savings because people are preparing for the high tax rate will come in the future, in order to pay

principal and interest for existing debt. In fact, two points always exist in parallel. Thus, to make any opinion in line with each country's period, it depends on important factors that consumer behavior. (Douglas, 1998)

In term of positive, the government can use debt as a financial instrument to cover capital needs for investments, national key projects, production development encouragement, economic growth stimulation. The solution of increasing public debt to offset the budget deficit could stimulate consumption, increase production, employment and GDP in the short term. (Douglas, 1998)

However, the fact that, in the long run, a high level of government debt is also a reason for the increase in interest rate, decrease in investment, savings reduction and it encourages foreign capital to inflow, so far, the national potential output growth is slow. Public debt raises and exceeds safe limit will make the economy vulnerable and under pressure from both inside and outside the country. Specifically, the impacts of national debt on the economy as follow:

First, the high level of public debt reduces the accumulation of private capital, leads to crowding-out effect of private investment. When government debt increases, especially domestic borrowing, private capital accumulation will be replaced by the accumulation of government debt. Instead of owning stocks, corporate bonds or savings in banks, citizen own government bonds. Consequently, the supply of capital decreases while demand in government credit increases, which pushes interest

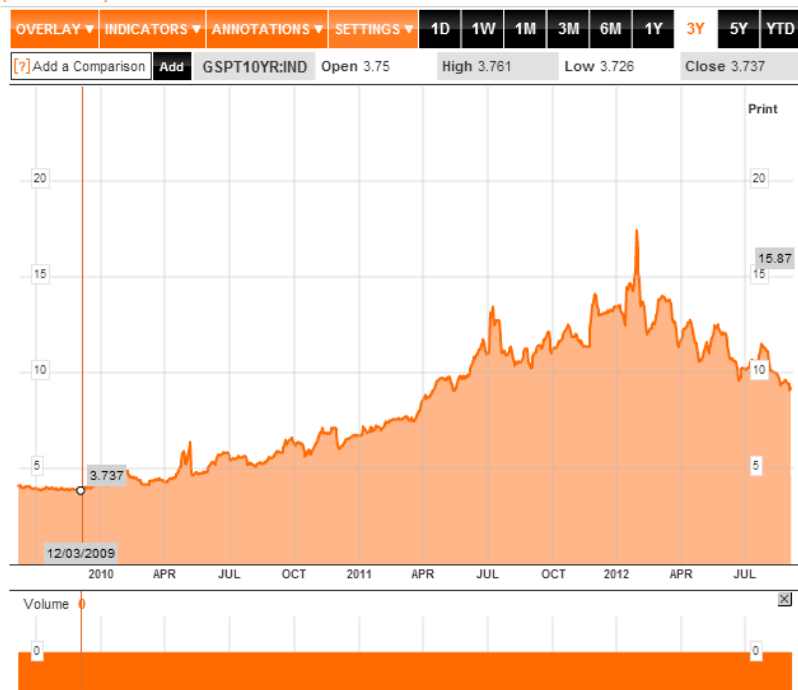
increase, increases investment costs and can lead to crowding-out effect in private sector investment. (Douglas, 1998)

Managing the budget deficit problem and the need to pay for the public debt raising, Portuguese financial market is facing the craze when government bond yield has continued raising and reached to a record since joining the Euro area. In 2011, yields of Portuguese government 10-year bonds rose to 13.5%, and as a result, they had to call for a bailout because of the risk of default. (Bloomberg.com, 2012)

Second, it creates inflationary pressures. Inflation is caused by two main reasons: increased in total demand, or due to cost push. Government increases borrowing debt by issuing bonds. On one hand government expenditure increases, according to Datosmacro.com, the Consumer Price Index of Portugal increased 1.1% from 2.52% in year 2010 to 3.62% in year 2011. This was due to the significant increase of national debt in Portugal, from £161,257 million in 2010 up to £184,291 million in 2011 or from 93.30% of GDP in 2010 to 107.80% of GDP in 2011. On the other hand, it creates a pressure to push interest rates up. Raising domestic debt leads to raise interest rates, increase investment cost, increase the cost of goods sold and selling price. Besides that, when interest rates raises, bond holders feel to be richer and consume more. Private consumption increases, government expenditure increases, it leads to demand of goods and services increase, creates inflationary pressures in the short run, then, it makes a negative

Figure 1: Portuguese Government Bonds 10 Years Note

Interactive Chart for PORTUGUESE GOVERNMENT BONDS 10YR NOTE PORTUGAL PL (GSPT10YR)



Snapshot for PORTUGUESE GOVERNMENT BONDS 10YR NOTE PORTUGAL PL (GSPT10YR)

High: 9.24600 Low: 8.66300

(Source: Bloomberg, 2012)

impact on economic growth of the economy. When government borrows debt from foreign lenders, a large flow of foreign currency inflows may reduce pressure on the current balance in short run. In the longer term, the pressure to repay both principal and interest in foreign currency will push up the demand for foreign currency, devalue local currency, increase the import cost of raw materials, machinery and equipment, and lead to the risk of inflation. Currency rate increases, as a result, the cost of debt repayment becomes more expensive, which is beyond the endurance of the budget might lead to the risk of default. (Douglas, 1998)

Third, it affects to political and

social instability. When the debt is too big, tightening expenditures and the policy “austerity” are implemented in order to reduce budget deficit. This effort is necessary to meet the bailout conditions from international credit institutions. Nevertheless, the implementation of “austerity” has led to political and social instability of the poor and vulnerable people, who are affected the most from cutting government expenditures such as welfare. Currently, to receive a bailout to tackle the debt crisis, the Portuguese government has decided to increase the tax revenues. This will be done by rising several taxes, from value added tax (VAT) to income tax, estate tax, and taxes in many products such as alcohol, cigarettes,

etc. In order to protest against this new tax policy, many thousands of people across Portugal joined the protests. (Almeida, 2012)

Fourth, there is an impact on credit rating by national debt and budget deficits. When public debt and budget deficit increase, the economy will be downgraded by professional credit rating institutions. In period 2010-2011, the size of public debt and budget deficit increased significantly leading to a downgraded Portugal economy from A1 to Ba2 (Moody rating), and from A+ to BBB- (Standard & Poor rating). When credit rating institution downgrades the Portuguese government bonds, big investment funds will sell out of these bonds immediately, and refuse to buy in the next issue at the same time. If the government wants to borrow money from financial market, they have to accept a higher cost of capital. In year 2012, with the tightening expenditures and the policy “austerity” were implemented, budget deficit and national debt of Portugal were improved very much. Therefore, the economy credit rating of this country was upgraded by the two biggest credit rating Moody, and S&P. The ratings were: Ba3 (on 13/02/2012 by Moody rating), and BB (on 13/01/2012 by S&P rating). (Datosmacro, 2012)

5. Conclusions

In conclusion, the aim of this project is to provide audiences with basic information to understand about national debt and budget deficits. They have different meanings but there is a linkage between them. First of all, national debt includes loans that government borrows to refinance

Table 2: Portugal's credit rating

Portugal Moody's Rating							
Calif. Long Term				Calif. Short Term			
Foreign Currency		Local Currency		Foreign Currency		Local Currency	
Date	Calif.	Date	Calif.	Date	Calif.	Date	Calif.
13/02/2012	Ba3	13/02/2012	Ba3			05/07/2011	(P) NP
05/07/2011	Ba2	05/07/2011	Ba2			15/03/2011	(P) P-2
04/05/2011	Baa1	04/05/2011	Baa1			08/27/2010	(P) P-1
15/03/2011	A3	15/03/2011	A3				
13/07/2010	A1	13/07/2010	A1				
05/04/1998	Aa2	10/02/1997	Aa2				
10/02/1997	Aa3						
11/18/1986	A1						

S & P Rating Portugal							
Calif. Long Term				Calif. Short Term			
Foreign Currency		Local Currency		Foreign Currency		Local Currency	
Date	Calif.	Date	Calif.	Date	Calif.	Date	Calif.
13/01/2012	BB	13/01/2012	BB	13/01/2012	B	13/01/2012	B
29/03/2011	BBB-	29/03/2011	BBB-	29/03/2011	A-3	29/03/2011	A-3

Source: Datasmacro, 2012

for budget deficits. To do that, the government asks for a bailout package of international financial institutions such as EU or IMF. As this project has illustrated, there are many arguments about implications of these values on the economic performance, include positive and negative impacts. Therefore, an example of Portugal has been used to see the actual impacts of these, such as: crowding-out effect of private investment; inflationary pressures; political and social instability; credit rating. In order to achieve economic stability, the country should consider how to use the bailout package effectively and efficiently.

What happened to Portugal, and other countries in EU is a valuable lesson for other governments before considering a debt. Actually, debt is not a sin, but the problem is how to use debt●

REFERENCES

- Almeida, H. (2012), *Portugal Lurches Into Austerity Trap With Creditors: Euro Credit*, [Online] New York: Bloomberg. Available at: <http://www.bloomberg.com/quote/GSPT10YR:IND/chart> [Accessed 06 September 2012].
- Bloomberg (2012), *Portuguese Government Bonds 10yr Note Portugal PL*, [Online] New York: Bloomberg, Available at: <http://www.bloomberg.com/news/2012-07-11/portugal-lurches-into-austerity-trap-with-creditors-euro-credit.html> [Accessed 23 August 2012].
- British Broad Casting (2012), *Portugal Calls for EU Financial Bail-out*, [Online] London: BBC News. Available at: <http://www.bbc.co.uk/news/business-12993318> [Accessed 22 August 2012].
- Datosmacro, (2012), *GDP of Portugal*, [Online] Spain: Datasmacro Available at: <http://www.datosmacro.com/pib/portugal> [Accessed 18 August 2012].
- Douglas W. E. (1998), *Government Debt*, Handbook of Macroeconomics, Harvard University and NBER.
- European and Financial Affairs (2011), *European Economics Forecast – Autumn 2011*, [Online] Available at: http://ec.europa.eu/economy_finance/publications/european_economy/2011/pdf/ee-2011-6_en.pdf [Accessed 20 August 2012]

International Monetary Fund (2012), *Portugal*, [Online] Washington: IMF Available at: <http://www.imf.org/external/country/prt/> [Accessed 20 August 2012].

Joao L., and Jim S. (2012), *Portugal's Credit Rating Is Cut to Junk by S&P on Euro Crisis*, [Online] New York: Bloomberg Business Week Available at: <http://www.businessweek.com/news/2012-01-15/portugal-s-credit-rating-is-cut-to-junk-by-s-p-on-euro-crisis.html> [Accessed 19 August 2012].

Michael P., Melanie P. and Kent M. (2003), *Fiscal Policy*, 5th ed. Edinburgh: Pearson Education Ltd.

Moody's Investment Service (2009), *Moody's Rating Symbols And Definitions*, [Online] New York: Moody's Corporation, Available at: <http://www.moodys.com/sites/products/AboutMoodyRatingsAttachments/MoodyRatingsSymbolsand%20Definitions.pdf> [Accessed 22 August 2012].

New York Times (2011), *Political Divide Poses Risks for Portugal in Bailout Talks*, [Online] Available at: <http://www.nytimes.com/2011/04/08/business/global/08euro.html?pagewanted=all> [Accessed 25 August 2012].

OECD (2010), *Development Assistance Committee (DAC)* [Online] Paris: OECD Publishing. Available at: <http://www.oecd.org/development/peerreviews/development/46552896.pdf>, [Accessed 19 August 2012]

UNESCO (2010), *Unesco Science Report 2010 - The Current Status of Science Around the World*, [Online] Paris: UNESCO Publishing, Available at: <http://unesdoc.unesco.org/images/0018/001899/189958e.pdf>, [Accessed 19 August 2012].

William J. Baumol and Alan S. Blinder (1994), *Budget Deficits and the National Debt: Fact and Fiction*, 6th ed, Orlando: Harcourt Brace & Company.

Bibliography

Arnold, R. A. (1992), *Budget Deficits and the National Debt*, 2nd ed., New York: West Publishing Company.