

**THE EFFECT OF BUDGET STRUCTURE ON THE DEFICIT OF PUBLIC BUDGET
AND ECONOMIC GROWTH: EVIDENCES FROM VIETNAM AND TAIWAN**

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ABSTRACT

The purpose of this study is to investigate the relationships of public budget deficit and other relevant factors by examining the budget structure of Vietnam and Taiwan. This study involved a comparison, developing country and developed country, regarding to public expenditure and deficit for economic growth and aims to discover their effects on long run economic growth. The results of this study found a positive effect of the structure of revenues on the budget deficit. Tax revenue affects budget deficit stronger than Non-tax revenue. The results also showed that the structure of expenditure negatively affects budget deficit. Current expenditure had a significant relationship with budget deficit, compare to capital expenditure. Additionally, this study implied that there is a significantly positive effect of budget deficit on internal and external debt. The empirical evidence in this study suggested that the budget deficit has negative effects on economic growth. This study, therefore, not only contributes to the debate on the use fiscal policy to influence economic growth but also provide further empirical evidence on the influences of public budget structure.

Keyword: Public Revenue, Public Expenditure, Deficit of public budget, Public Debts, Economic Growth.

INTRODUCTION

Today, the most important debate in economics is government spending and government revenue. The public budget is viewed as an essential instrument to evaluate performance of the government and to measures its ability to face the social and economic challenges. The structure of public budget takes a significant part in the social and economic development (Maswadeh, 2016). Many previous studies have shown that public budget is the most widely used planning and control tool in both developed and developing countries. The public budget deficit and public debt have become very important issues for the economic growth in the highly unstable context of current world economy (Teeter & Packer, 2012). The imbalance between the public revenues and expenditures increases the public budget deficit. Such fiscal imbalances tend to creates economic difficulties. To cover the budget deficit by adjusting budget structure, such as decrease in public expenditure and / or increase in revenues, will stimulate economic growth (Petanlar & Sadeghi, 2012).

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However, over the years, there have been different views on the causal relationship between public budget and public deficit. The need to determine the relationship between public revenue and public expenditure cannot be overemphasized. Understanding the effect of the public budget structure on budget deficit is necessary for sound fiscal policy development and to reduce the budget deficit in the public budget (Olaoye, 2015).

This study aimed to investigate the structure of the public revenues and expenditures and their effects on deficit of the public budget and economic growth by testing the economic data, such as the public revenues, expenditure, and internal and external debts, which was adapted from 2003 to 2017 annual public budget and public debt publications of Vietnam and Taiwan. The study expand the existing researches by examining the public budget of Vietnam and Taiwan; and provide the suggestions to the concerned authorities, such as policymakers, and decision-makers at the Ministry of Finance, Public Debt Directorate, Public Budget Directorate, and different tax agencies. This research, therefore, not only contributes to the debate on the use fiscal policy to influence economic growth but also provide further empirical evidence on the influences of public budget structure.

LITERATURE REVIEW

Public Budget Structure and Public Budget Deficit

The preservation of public budget revenues and expenditures is a difficult "problem" for many countries in the context of the global economic crisis. In recent years, budget data published in many countries show that not only countries in Asia (China, India, Indonesia ...) but even major economies (USA, France, Germany, Russia, Italy, etc.) are also struggling with a huge budget deficit, due to tax losses. Meanwhile, expenditures (for unemployment benefits, unemployment insurance, energy subsidies ...) are increasing. Deficit may be a decrease in tax revenue or an increase in expenditure. If the "revenue and expenditure" hypothesis exists, public deficits can be avoided by implementing government revenue stimulus policies and the reasonable budget spending can decrease public budget deficit. But if it does not perform well, budget overspending is one of the causes of increase public budget deficit, and ultimately the economic crisis (Libby & Lindsay, 2010).

For developing countries, such as Vietnam, budget deficits cannot be avoided. Because the per capital income is too low, it does not allow the government to raise the rate of mobilization from gross domestic product (GDP) and the public budget. Meanwhile, the demand for government spending has increased especially when they implemented investment programs to improve their economic structure and guide growth (McCluskey & Trinh, 2013). Therefore, the government must borrow money internally or externally to make up for the budget deficit. The increased demand for public debt will distort private investment as a result of rising interest rates and reducing private investment will reduce economic growth.

Public Budget Deficit and Public Debts Structure

Over the years, there have been different views on the causal relationship between public budget and public deficit. Some researchers found that increases in tax, which is public revenue, will

give rise to increased public expenditure, and this may result in further increase in public deficits (Yousef & Mohammad, 2012; Quraishi, 2012; Zeaud, 2015). On the other hand, decrease the public expenditure is an improvement for public budget. However, mostly public spending cutting is primarily focus on cutting back on capital expenditure, while current expenditure, which is considered less contributing to long-term economic growth, has not been paid much attention (Kaya & Şen, 2013). Theoretically, public expenditure can be considered as one of the drivers of economic growth. However, once government spending has exceeded a certain threshold, it will hinder economic growth.

Public debt is one of the sources of financial capital in any economy, especially for developing countries. The relationship between budget deficits and public debt has been a matter of debate in recent years (Perry, 2014). High budget deficits coupled with a rapidly rising debt burden are the main reason the government is carrying out a series of bond issuance programs, both domestically and internationally, to reverse the debt. Public debt in developing countries is also a major economic problem because it can have negative effects, and thus reduce economic growth. Teles & Mussolini (2014) revealed the size of public debt is a significant factor in the relationship between public debt and economic growth, which means that the more public debt, the lower the growth.

Public Budget Deficit and Economic Growth

There are debates about the relationship between budget deficits and economic growth. While major economies consider a positive relationship, smaller economies have argued the opposite. Southeast Asian nations have been known for a large and prolonged budget deficit. However, the economic growth rate in these countries has been highly appreciated in recent years. Bose, Haque & Osborn (2007) supported that budget deficits can help economic growth as it helps to increase the efficiency of restructuring, education and social welfare and also found the share of public capital expenditure in GDP is positively and significantly correlated with economic growth, but current expenditure is insignificant. The study of Odhiambo et.al (2013) indicated that public deficits can increase economic growth as it enhances productivity by providing education, health and social interest. The study therefore found a positive relationship between economic growth and budget deficits in Kenya.

Ahmad's (2013) study referred to the role of the budget deficit on economic growth in Pakistan showed that the deficit has a positive impact on economic growth. However, the study of Iqbal, Din & Ghani (2017) revisited the relationship between the public deficit and economic growth in Pakistan. Their findings implied that the public deficit has a negative impact on economic growth in developing country. Cinar, Eroglu & Demirel (2014) examined the potential validity or invalidity of budget deficit policies for the best 5 (Panel A) and worst 5 countries (Panel B) in the Euro zone and the results showed the effect of budget deficit on economic growth was positive and significant in Panel B (developing countries) and insignificant in Panel A (developed countries) in the short run. The study of Zoto & Berisha (2016) concluded that the budget deficit and the economic growth have inverse relationship in the long run, which is in accordance with the endogenous growth theories.

METHODOLOGY

Research design

This study was conducted to investigate the relationship among public budget structure (tax revenues, non-tax revenues, current expenditure and capital expenditure), budget deficits and economic growth from a comparative perspective (developing and developed countries). The common method used is the data table, which can investigate the relationships between strings by combining different time periods and states at the same time. This study is based on secondary data and the descriptive and quantitative method will be approach to examine the issues. This research collected the annual data for all the independent variables and dependent variables during the period 2003 – 2017 from annual public budget and public debt publications of Vietnam (developing economy) and Taiwan (developed economy).

The conceptual framework is proposed as the followings

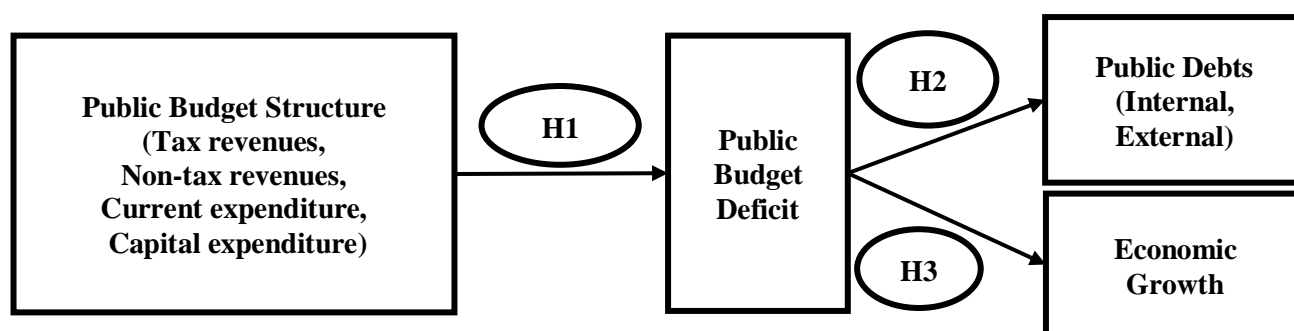


Figure 1- Research Conceptual Framework

Based on the literature review, the hypothesis of the study is developed as the followings:

H₁: The Relationship between Public Budget Structure and Public Budget Deficit is Significant

H_{1a}: The effect of tax revenues on public budget deficit is significant.

H_{1b}: The effect of non-tax revenues on public budget deficit is significant

H_{1c}: The effect of current expenditures on public budget deficit is significant.

H_{1d}: The effect of capital expenditures on public budget deficit is significant

H₂: The Relationship between Public Budget Deficit and Public Debts Structure is Significant

H_{2a}: The effect of public budget deficit on the internal debts is significant.

H_{2b}: The effect of public budget deficit on the external debts is significant

H₃: The public budget deficit significantly affects the economic growth

Data analysis

The data collected in this study are essentially quantitative. A research is a clearly defined group of subjects: tax revenues, non-tax revenues, current expenditure, capital expenditure, internal debt, external debt. Regression analysis is used to analyze and find out the existence of relationships between: public budget and the different relevant factors. In this study, to test study’s hypotheses, the Statistical Program for Social Sciences (SPSS) was used; particularly linear regression analysis was used to predict the dependent variable value based on a set of independent variables. The effect was represented between the dependent and independent

variables as linear equations.

To test hypotheses H_{1a}, H_{1b}, H_{1c}, H_{1d}, multiple-regression was used to analyze the dependent variable value (public budget deficit) based on a set of independent variables (tax revenues, non-tax revenues, current expenditures, and capital expenditures).

$$Deficit_i = \alpha_i + \beta_1 TR_i + \beta_2 NTR_i + \beta_3 CuEx_i + \beta_4 CaEx_i + \varepsilon_i$$

Where

Deficit = Public budget deficit

TR = Tax revenues

NTR = Non-tax revenue

CuEx = Current Expenditure

CaEx = Capital Expenditure

To test hypotheses H_{2a} and H_{2b}, simple regression was used to analyze the independent variable (public budget deficit) on both dependent variables (internal and external debts).

$$InDebit_i = \alpha_i + \beta_1 Deficit_i + \varepsilon_i$$

$$ExDebit_i = \alpha_i + \beta_1 Deficit_i + \varepsilon_i$$

Which

InDebit = Internal debts

ExDebit = External debts

Deficit = Public budget deficit

To test hypotheses H₃, single regression was used to analyze the dependent variable value (economic growth) based on an independent variable (budget deficit).

$$Growth_i = \alpha_i + \beta_1 Deficit_i + \varepsilon_i$$

Which

Growth = Economic growth

Deficit = Public budget deficit.

RESULT AND DISCUSSION

Descriptive statistics

The ratio of gross receipts to GDP is useful for measuring the current and future effects of revenue and economic growth and also to assess the size and economic impact of government. Total revenue tends to increase as GDP rises. Conversely, when there is a recession, sales usually fall. If spending increases along with economic growth and the ratio of income / GDP remains unchanged, the overall size of the government remains roughly the same as the rate of economic activity. However, if spending growth exceeds total revenue, the government will be forced to borrow money, raise taxes or cut spending. In this study, as showed on Table 1, the total revenue per GDP of Vietnam in the years 2003-2017 ranged between 15% and 27% and Taiwan is between 11% and 13%. Vietnam has higher mean (20%) of this ratio, compared to Taiwan (12%). The result implied Taiwan as a developed country has greater GDP than Vietnam as a developing country. Reference to the table 1 revealed that the proportion of total revenues to

total expenditures of Vietnam for the years (2003-2017) ranged between (81%-94%) and Taiwan ranged between (84%-95%). The ratio is less than 100% for both countries, which mean all of them have public budget deficit during the period of 2003-2017. However, Vietnam has lower mean (84%) of this ratio, compared to Taiwan (91%). The finding indicated that Vietnam has more serious budget deficit problem than Taiwan does. Additionally, the tax revenues of Vietnam accounted for (54%-93%) of total public revenues and Taiwan ranged between (68%-80%), While non-tax revenues account of Vietnam for the remaining percentage (7%-46%) and Taiwan ranged between (20%-32%). The mean analysis showed that the Vietnam budget heavily depends on taxes to generate revenues, which tax revenue almost occupied four-fifth of the public budget resources, compared to Taiwan only seven-tenths of the public budget resources.

Table 1- Revenues Ratios for the years (2003-2017)

Year	Total Revenues / GDP		Tax Revenue / Total Public Revenues		Non-Tax Revenue / Total Public Revenues		Total Public Revenues / Total Public Expenditure	
	Vietnam	Taiwan	Vietnam	Taiwan	Vietnam	Taiwan	Vietnam	Taiwan
2003	0.15	0.12	0.93	0.70	0.07	0.30	0.81	0.85
2004	0.17	0.12	0.86	0.68	0.14	0.32	0.81	0.84
2005	0.20	0.12	0.84	0.68	0.16	0.32	0.82	0.86
2006	0.24	0.11	0.54	0.71	0.46	0.29	0.84	0.88
2007	0.27	0.11	0.83	0.75	0.17	0.25	0.94	0.91
2008	0.25	0.12	0.87	0.75	0.13	0.25	0.91	0.95
2009	0.22	0.13	0.85	0.76	0.15	0.24	0.88	0.92
2010	0.24	0.11	0.87	0.73	0.13	0.27	0.86	0.90
2011	0.27	0.11	0.87	0.71	0.13	0.29	0.89	0.92
2012	0.26	0.12	0.88	0.72	0.12	0.28	0.89	0.89
2013	0.24	0.11	0.89	0.74	0.11	0.26	0.89	0.91
2014	0.19	0.11	0.87	0.74	0.13	0.26	0.83	0.89
2015	0.21	0.11	0.84	0.74	0.16	0.26	0.85	0.92
2016	0.20	0.11	0.80	0.79	0.20	0.21	0.84	0.92
2017	0.22	0.11	0.79	0.80	0.21	0.20	0.87	0.93
Mean	0.20	0.12	0.83	0.72	0.17	0.28	0.84	0.91

Significant growth in the size of government spending and its impact on longrun economic growth have offered many different interpretations of observable phenomena. The relationship between public expenditure and economic growth is not clear and still in debate. Reference to the table 2 showed total expenditure on Vietnam's GDP in the years 2003-2017 ranges from 19% to 30% and mean of the ratio is 23% near the the optimal size of public expenditure for developing economies (15-20% of GDP). Oppositely, total expenditure on Taiwan's GDP is between 11% and 14% and the mean is 13%. Comparatively, out of the total public expenditures, the current expenditures of Vietnam accounts for (56%-81%) and Taiwan ranged between (79%-85%). The remaining percentage of Vietnam ranging between (19%-44%) represents the proportion of capital expenditures to total expenditures and Taiwan ranged between (15%-21%). The result, that the current expenditures are largely higher than the capital expenditures, indicated that Vietnam and Taiwan are both consumption countries that primarily rely on the current

expenditures rather than capital expenditure. However, the average proportion of capital expenditure to total expenditures of Vietnam (34%) is double of the ratio of Taiwan (17%). The finding revealed that Vietnam as a developing country still has higher need for capital expenditure, compared to Taiwan.

Table 2- Expenditures Ratios for the years (2003-2017)

Year	Total Expenditures / GDP		Current Expenditures / Total Public Expenditures		Capital Expenditures / Total Public Expenditures		Total Public Revenues / Total Expenditure	
	Vietnam	Taiwan	Vietnam	Taiwan	Vietnam	Taiwan	Vietnam	Taiwan
2003	0.19	0.14	0.59	0.79	0.41	0.21	0.81	0.85
2004	0.21	0.14	0.57	0.84	0.43	0.16	0.81	0.84
2005	0.24	0.14	0.56	0.82	0.44	0.18	0.82	0.86
2006	0.28	0.13	0.62	0.84	0.38	0.16	0.84	0.88
2007	0.28	0.12	0.66	0.83	0.34	0.17	0.94	0.91
2008	0.27	0.13	0.70	0.84	0.30	0.16	0.91	0.95
2009	0.25	0.14	0.72	0.82	0.28	0.18	0.88	0.92
2010	0.28	0.12	0.74	0.85	0.26	0.15	0.86	0.90
2011	0.30	0.12	0.75	0.85	0.25	0.15	0.89	0.92
2012	0.29	0.13	0.76	0.83	0.24	0.17	0.89	0.89
2013	0.27	0.13	0.78	0.84	0.22	0.16	0.89	0.91
2014	0.22	0.12	0.81	0.84	0.19	0.16	0.83	0.89
2015	0.24	0.12	0.80	0.84	0.20	0.16	0.85	0.92
2016	0.24	0.12	0.77	0.84	0.23	0.16	0.84	0.92
2017	0.26	0.11	0.72	0.85	0.28	0.15	0.87	0.93
mean	0.23	0.13	0.66	0.83	0.34	0.17	0.84	0.91

To assess the sustainability of public debt, the Debt/GDP ratio is considered the most common indicator for an overview of a country's public debt. When a developed country has a total debt of more than 90% of GDP, growth will slow down on average 100bps, while developing countries with debt/GDP exceeding 60% will reduce growth by 200bps. As showed on Table 3, total debts to the GDP of Vietnam for the years (2003-2017) ranged between (38% - 59%) and mean of this ratio is 41%. The Debt/GDP ratio of Taiwan ranged between (0% - 2%). In total debts structure of Vietnam, external debt accounted for 56% and internal debt accounted for 44%. On the other hand, in total debts structure of Taiwan, internal debt accounted for 100% and external debt is 0%. In other words, total debt is internal debt. As for debts, compared with the budget deficit, the internal debt of Vietnam accounts for (3.31%-9.25%) of the total deficit and Taiwan ranged between (0%-1.7%). On the other hand, external debts of Vietnam ranged

between (4.84%-14.07%) of the total budget deficit; and the total debt (internal and external) accounted for (8.14%-23.32%) of the total budget deficit. The results indicated there is a heavy need for the debts to fill up the deficit in the Vietnam public budget, especially for external debt.

Table 3- Debts Ratios for the years (2003-2017)

Year	Total Debts / GDP		Internal Debts / Budget Deficit		External Debts / Budget Deficit		Total Debts / Budget Deficit	
	Vietnam	Taiwan	Vietnam	Taiwan	Vietnam	Taiwan	Vietnam	Taiwan
2003	0.38	0.00	4.78	0.00	5.49	0.00	10.27	0.00
2004	0.38	0.00	3.91	0.00	5.67	0.00	9.58	0.00
2005	0.36	0.00	3.33	0.00	5.18	0.00	8.51	0.00
2006	0.38	0.00	3.31	0.00	4.84	0.00	8.14	0.00
2007	0.41	0.00	9.25	0.00	14.07	0.00	23.32	0.00
2008	0.39	0.00	6.73	0.00	9.77	0.00	16.50	0.00
2009	0.45	0.01	7.77	1.21	7.82	0.00	15.59	1.21
2010	0.46	0.02	4.83	1.34	7.13	0.00	11.96	1.34
2011	0.48	0.01	6.02	0.91	9.35	0.00	15.37	0.91
2012	0.44	0.02	6.13	1.38	8.08	0.00	14.21	1.38
2013	0.45	0.01	5.70	1.16	9.41	0.00	15.10	1.16
2014	0.43	0.01	4.89	0.91	6.13	0.00	11.02	0.91
2015	0.46	0.00	5.39	0.48	7.44	0.00	12.83	0.48
2016	0.59	0.01	6.80	1.48	8.50	0.00	15.30	1.48
2017	0.58	0.01	7.74	1.70	9.95	0.00	17.69	1.70
mean	0.41	0.01	5.24	0.81	7.30	0.00	12.54	0.81

Test for hypothesis 1

The results of multiple regression implied that the tax revenues, non-tax revenues, current expenditures and capital expenditures fully account for the deficit in the public budget, which is reasonable, since the public budget deficit represent the difference between the total public revenues (tax and non-tax revenues) and total expenditures (current and capital). The analysis

results, as showed on Table 4, demonstrates that value was statistically significant at significance level ($P \leq 0.01$), meaning that the values of R^2 and regression model was statistically acceptable. The multiple regression equations reformulated to present the effect of the tax and non-tax revenues as well as current and capital expenditure on the Vietnam and Taiwan public budget deficit can be demonstrated as follows:

Vietnam: $Deficit = 4.754TR + 1.128NTR - 5.331 CuEx - 1.402 CaEx$

Taiwan: $Deficit = 1.878TR + 0.035NTR - 1.324 CuEx - 0.428 CaEx$

The regression coefficients of tax and non-tax revenues were 4.754 and 1.128, respectively. The result indicated tax revenues have the significantly greater positive effect on the deficit of the Vietnam public budget, compare to non-tax revenues. As for the regression coefficients of current and capital expenditures, the results showed that the regression coefficient values were (-5.331) and (-1.402), respectively, which were statistically significant at ($P \leq 0.01$) level. The results implied that current expenditures and capital expenditure negatively affects the Vietnam public budget deficit and current expenditures have considerable negative effect than capital expenditure. Additionally, the analysis results of Table 4 related to Taiwan supported the findings of Vietnam case. The regression coefficients of tax and non-tax revenues were 1.878 and 0.035, respectively. And also results showed that the regression coefficient values of current and capital expenditures were (-1.324) and (-0.428), respectively. Statistically significant results, as provided by Table 4, indicated tax revenue has a greater positive impact on budget deficit, compared to non-tax revenue. And also, capital expenditure negatively affects budget deficit but with less effect than current expenditure. Therefore, hypothesis one was accepted. There is a significant relationship between public budget structure and public budget deficit. The findings also implied that the effect of public budget structure on budget deficit in Vietnam (developing country) is greater than that in Taiwan (developed country).

Table 4- The effect of public budget structure on public budget deficit (Vietnam and Taiwan)

Dependent Variable (Deficit)		Vietnam	Taiwan
	R-squared	1	0.873
independent variable	F-Ratio	000	17.237
	Prob.(F)	0.000	0.000
Tax Revenue	Coefficient (Beta)	4.754	1.878
	Sig(p)	0.000	0.000
Non-tax Revenue	Coefficient (Beta)	1.128	0.035
	Sig(p)	0.000	0.000
Current Expenditure	Coefficient (Beta)	-5.331	-1.324
	Sig(p)	0.000	0.000
Capital Expenditure	Coefficient (Beta)	-1.402	-0.428
	Sig(p)	0.000	0.000

Test for hypothesis 2

While the deficit is at acceptable levels, the government implements fiscal policy to borrow only within the country. However, for excessive deficits, the government extends the borrowing resources out of the country due to limited capital. Based on the analysis results of Table 5, the simple regression equations to represent the relationship between the budget deficit and debt structure (internal and external debts) can be reformulated as followings:

Vietnam: $InDebts = 59740.596 + 0.958 Deficit$

Vietnam: $ExDebts = 39083.437 + 0.958 Deficit$

Taiwan: $InDebts = 46934.911 + 0.592 Deficit$

The analysis results of Vietnam’s budget, as presented by Table 5, showed budget deficit explain the variation in internal and external debts by 91.7% ($R^2 = 0.917$) and simple regression values were statistically significant at ($P \leq 0.01$) level. The value of simple regression coefficients of the budget deficit on both the internal debts and the external debts were the same (0.958), which mean that the Vietnam budget deficit positively influences both internal and external debts of the country. The results implied that the higher the budget deficit is, the higher the internal debt and external debts will be. The result could be due to the debt structure of Vietnam, which indicated that Vietnam relies on both internal debt and external debts to meet the deficit in Vietnam's public budget. Additionally, as shown on Table 5, the result of Taiwan budget indicated budget deficit explain the variation in internal l debts by 35.1% ($R^2 = 0.351$) and simple regression values were statistically significant at ($P \leq 0.01$) level. The value of simple regression coefficients of the budget deficit on the internal debts was (0.592), which mean that the Taiwan budget deficit has a significantly positive effect on internal debts of the country. The internal debts accounted for total proportion of debt structure, which indicated that Taiwan totally relied on the internal debts to meet the deficit of Taiwan public budget. The results supported the findings of Vietnam case. Therefore, hypothesis Two was accepted. There is a significant relationship between public budget deficit and public debt structure. The findings also implied that the positive effect of public budget deficit on internal debt in Vietnam (developing country) is greater than that in Taiwan (developed country).

Table 5- The effect of the public budget deficit on debt structure (Vietnam and Taiwan)

		Vietnam		Taiwan
Dependent Variable		Internal Debt	External Debt	Internal Debt
independent variable	R-squared	0.917	0.917	0.351
F-statistic	F-Ratio	144.088	144.453	7.016
	Prob.(F)	0.000	0.000	0.000
Deficit	Coefficient (Beta)	0.958	0.958	0.592
	Sig(p)	0.000	0.000	0.020

Test for hypothesis 3

In the appropriate deficit level, the government adopts financial and non-financial techniques to stimulate economic growth. On the other hand, the government can not control the level of deficit, deficit will be one of the causes affecting economic growth, resulting in economic slowdown. Based on the analysis results of Table 6, the simple regression equations to represent the relationship between the budget deficit and economic growth can be reformulated as followings:

Vietnam: *Growth = 228450.078 - 0.978 Deficit*
 Taiwan: *Growth = 17403943.47 - 0.432 Deficit*

The analysis results, as presented by Table 6, showed budget deficit explain the variation in economic growth by 93.5% ($R^2 = 0.935$) and simple regression values were statistically significant at ($P \leq 0.01$) level. The value of simple regression coefficients of the budget deficit on economic growth was (-0.978), which mean that the Vietnam budget deficit negatively influenced economic growth of the country. The results implied that the higher the budget deficit is, the lower the economic growth will be. Additionally, as shown on Table 6, the result of Taiwan budget indicated budget deficit explain the variation in economic growth by 28.7% ($R^2 = 0.287$) and simple regression values were statistically significant at ($P \leq 0.01$) level. The value of simple regression coefficients of the budget deficit on economic growth was (-0.432), which mean that the Taiwan budget deficit has a significantly negative effect on economic growth of the country. The results supported the findings of Vietnam case. Therefore, hypothesis Three was accepted. There is a significant relationship between public budget deficit and economic growth. The findings also implied that the negative effect of public budget deficit on economic growth of Vietnam (developing country) is greater than that in Taiwan (developed country).

Table 6- The effect of the public budget deficit on economic growth (Vietnam and Taiwan)

Dependent Variable (economic growth)		Vietnam	Taiwan
Independent Variable	R-squared	0.935	0.287
	F-Ratio	286.817	2.983
F-statistic	Prob.(F)	0.000	0.000
	Coefficient (Beta)	-0.978	-0.432
Deficit	Sig(p)	0.000	0.000

CONCLUSION AND SUGGESTIONS

The public budget plays an important role for the economic development, especially in developing countries. To capture and assess the practical application of fiscal policies in Vietnam and Taiwan, this study was conducted to compare and investigate the associations among the structure of revenues, structure of expenditure, the budget deficit, debts and economic growth within these counties. This study provided empirical findings as followings.

Tax revenues have greater positive effect on budget deficit than non-tax revenues and capital expenditure negatively affects budget deficit but with less effect than current expenditure. This

evidence supports the findings of Maswadeh (2016). The findings implied that budget deficit positively influences both internal and external debts and negatively influences economic growth of the country, which supporting the research of Iqbal et al. (2017). The findings also implied that the effect of those issues in developing country is greater than those in developed country, which meaning the level of influence is different in different economic entities (Cinar et al., 2014). The empirical evidences in this study suggested that to reduce the public budget deficit, governments should increase tax revenues and cut current expenditure. Governments can finance budget deficits through foreign resources to invest in the development of infrastructure and national projects serving the country's development interests. In addition, governments should promote the fiscal policies that stimulate rapid and sustainable economic growth; without cutting public spending or raising the tax rate.

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