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Impact of Direct Tax and Indirect Tax on Economic Growth in Vietnam

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Abstract

Tax can be categorised into direct tax and indirect tax. This paper uses the ordinary least-squares regression method to study the impact of direct and indirect tax on economic growth in Vietnam in the period 2003-2017. Statistical data is collected from the Ministry of Finance of Vietnam. Theoretically, tax generates the state budget revenue and is a tool to regulate the economy. The results of statistical tests show that tax has a positive impact on Vietnam's economic growth. However, the effects of direct tax and indirect tax are different. The indirect tax has a positive influence and promote Vietnam's economic growth, while the impact of the direct tax is invisible. There has not been sufficient evidence to confirm that the indirect tax has a more positive impact than the direct tax. To promote economic growth, Vietnam needs to restructure its tax system towards: (1) Increasing the proportion of indirect tax, reducing the proportion of direct tax in the state budget revenue; (2) Expanding tax bases; (3) Reducing tax rates of corporate income tax and personal income tax; (4) Increasing tax rates of environmental protection tax, natural resources tax, value added tax and excise tax on some types of goods which harm health and environment.

Keywords : Direct Tax, Indirect Tax, Economic Growth, Vietnam

JEL Classification Code : G38, H20, H21, O11

1. Introduction

Tax is a compulsory contribution to the state budget of enterprises, individuals and other subjects in accordance with the regulations. Tax has two basic functions. Tax creates a major and regular source of revenue to meet the government's spending needs. The mandatory nature with wide impact of tax is an important basis for the government to mobilize financial resources timely and sufficiently from the economy. Tax is also a tool to regulate the economy. By the means of tax, the government regulates the behaviour of enterprises and individuals, thereby directing production and consumption. A reasonable tax policy will promote economic growth, whereas an unreasonable tax regime will constrain enterprises and distort society's consumption

behaviour.

Taxation system is commonly classified into two segments namely direct tax and indirect tax. A direct tax is a form of tax which is imposed directly on tax payers who bear the tax burden. Tax burden cannot be shifted to other persons. In respect of an indirect tax, government collects tax from intermediaries. Tax payer is not an ultimate bearer of economic burden. The differences in collection methods, revenue bases and the transfer of economic tax burden create the differences in the effects of indirect and direct taxes on the economy. The proper combination of direct tax and indirect tax will optimize the positive impact of tax on the economy.

The tax system of Vietnam has been continuously reformed to keep pace with the economic development of each period. The regulations on different kinds of tax have been step-by-step issued, amended to govern many revenue sources. Up to now, the tax system of Vietnam includes: corporate income tax, personal income tax, agricultural land-use tax, land and housing tax, value added tax (VAT), excise tax, import-export duties, natural resources tax, environmental protection tax and registration tax. Tax has become the main revenue source of Vietnamese state budget. Tax has contributed for more than 4/5 of state budget

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revenue, timely meet the requirements on financial resources to maintain the operation of the state apparatus and capital accumulation for the development investment. However, direct and indirect tax have different effects on the economy, thus, in terms of economic growth target, there are three important questions:

- (1) Does tax (including direct tax and indirect tax) have a positive impact on Vietnam's economic growth?
- (2) How do direct tax and indirect tax affect Vietnam's economic growth separately?
- (3) Does indirect tax have a more positive effect on Vietnam's economy than direct tax?

This research will seek answers to three above questions, therefrom proposing suggestions on tax system restructuring to promote the Vietnamese economic growth in a steadily and sustainable manner.

2. Literature Review

The relationship between tax and economic growth is a major topic studied by many scholars. Basically, the scholars recognized that tax had a positive impact on the economy (Rahul, 2015; Ogundana, Ogundana, Ogundama, Ibidunni, & Adetoyinbo, 2017; Gashi, Asllani, & Boqolli, 2018). However, some other scholars claimed that tax had no impact on the economy of some specific countries (Gbato, 2017; Mehrara, Masoumib, & Barkhi, 2014). With regards to the relationship between direct tax, indirect tax and economic growth, scholars also have many different research results. Some scholars suggested the government prioritizes direct tax, whereas many other scholars recommended the government focus on indirect tax to promote economic growth.

Stoilova and Patonov (2012) confirmed that the structure of the tax system of EU countries (27) for the period 1995-2010 was important for economic growth. State budget revenue collection through direct tax was more efficient than through indirect tax. The main reason is due to the inequity and shrinking effects on production and sales of indirect tax. Although recognition of a tax system was always a controversial issue and it was difficult to draw a conclusion, Stoilova and Patonov (2012) still suggested EU countries build a tax system based on direct tax to enhance economic growth. Rahul (2015) divided tax into direct tax and indirect tax to research and confirmed that both kinds of tax were important for India's economy. However, for countries which had varied economic backgrounds like India, he was of opinion that the government should focus on increase of the proportion of direct tax and gradual reduction of the proportion of indirect tax in the tax revenue.

Ahmad, Sial, and Ahmad (2018) studied the impact of

indirect tax on Pakistan's economic growth for the period 1974-2010 and confirmed that indirect tax had negative significant effect on economic growth in the long-run. A 1% increase in indirect tax would reduce 1.68% in economic growth. Currently, indirect tax accounts for 63% and direct tax accounts for 37% of Pakistan's tax revenue. Therefore, the Pakistani government needs to change its tax structure towards reducing the proportion of indirect tax to promote economic growth. Aamir, Qayyum, Nasir, Hussain, Khan, and Butt (2011) had an intensive research when comparing tax revenue structures of India and Pakistan from 1999-2000 to 2008-2009. The results showed that Pakistan focused on collecting indirect tax, while India valued direct tax. The different structure of the tax system of two countries affected the economy differently. The country which had high revenue from indirect tax had a larger gap between the rich and the poor. Because of its focus on indirect tax, Pakistan failed to control its fiscal deficit. The scholars recommended the government of Pakistan to restructure its tax system towards increasing the proportion of revenue from direct tax to reduce the negative effects of the gap between the rich and the poor on the economy.

Ogundana et al. (2017) used data of the period 1994-2013 to make regression analysis on the relationship between indirect tax and direct tax on Nigeria's economic growth. The results showed that indirect tax had a positive and significant impact, while direct tax had a positive but insignificant effect on economic growth of Nigeria. Based on the research results, the scholars advised that Nigeria would achieve higher economic growth if it focused on indirect tax. Owino (2018) also had similar research results with Ogundana et al. (2017) when studying the relationship between indirect tax, direct tax and economic growth of Kenya in the period 1973-2010. He argued that indirect tax had a positive impact on Kenya's economy, while direct tax had a negative impact. Owino (2018) also suggested Kenyan government pay more attention to indirect tax because this kind of tax had a positive impact on economic growth. Macek (2014) examined the relationship of some types of tax with the economic growth of OECD countries for the period 2000-2011. Macek (2014) proved that the corporate income tax and personal income tax had the most negative impact on the economy. Value added tax also affected negatively to the economy, while there was no evidence that property tax had an adverse impact on the economic growth of OECD countries. Macek (2014) was of opinion that to promote economic growth, OECD countries needed to lower tax rates of personal income tax and corporate income tax, and increase indirect tax to compensate for the losses from decrease of income taxes.

3. Research Methodology and Empirical Results

3.1. Research Methodology

Ordinary least-square method is used in analysing the

impact of direct tax and indirect tax on economic growth of Vietnam in the period 2003-2017. Secondary data is taken from the Ministry of Finance of Vietnam. A regression model is built where independent variable is GDP and two dependent variables are direct tax and indirect tax.

$$GDP = F (DIR, IND)$$

Where:

GDP: Gross domestic product

DIR: Direct tax

IND: Indirect tax

The model is expressed as follow:

$$GDP = \beta_1 + \beta_2 DIR + \beta_3 IND + u$$

Where:

β_1 : Regression constant.

β_2, β_3 : Coefficients to be estimated. They measure the effects of direct tax and indirect tax on GDP, respectively.

u: stochastic error term.

Four hypotheses are set up based on regression results to test the impact of tax revenue, direct tax and indirect tax on the economy.

Hypothesis 1: Whether the population regression function is significant or not

Hypothesis 2: Whether DIR impacts GDP or not

Hypothesis 3: Whether IND impacts GDP or not.

Hypothesis 4: Whether IND has a more positive impact on GDP than DIR or not.

3.2. Empirical Results

Based on the data collected from the Ministry of Finance of Vietnam from 2003 to 2017 and Eviews 10.0, the regression result of the impact of direct and indirect taxes on economic growth of Vietnam is shown in the following Table 1:

Table 1: Empirical results

Dependent Variable: GDP Method: Least Squares Sample: 2003 2017 Included observations: 15				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-338180.3	135102.3	-2.503143	0.0278
DIR	3.111658	1.907123	1.631598	0.1287
IND	7.417698	1.041738	7.120502	0.0000
R-squared	0.983661	F-statistic		361.2190
Adjusted R-squared	0.980938	Prob(F-statistic)		0.000000
S.E. of regression	210456.4	Mean dependent var		2455746.
Sum squared resid	5.32E+11	S.D. dependent var		1524318.
Log likelihood	-203.4660			

$$GDP = - 338,180.3 + 3.111658 DIR + 7.417698 IND$$

Hypothesis 1: Whether the population regression function is significant or not

$H_0: R^2 = 0$ (The population regression function is not significant)

$H_1: R^2 \neq 0$ (The population regression function is significant)

F-statistic is used to test. With number of observations (n) =15, number of variables (k) = 3, and significance level (α) = 0.05, the result of F is 361.2190 > $F_{\alpha}(k-1; n-k) = 3.89$.

Based on above results, H_0 is rejected, therefore, H_1 is accepted. The significance of regression function shows that tax has significant positive effect on GDP. The regression results also indicate that independent variables included in the model (DIR and IND) explain about 98.3661% (R-squared = 0.983661) variations in the dependent variable (GDP). Hence, only 1.6339% variability in GDP is explained by other factors outside direct tax and indirect tax.

Therefore, the model is statistically robust.

Hypothesis 2: Whether DIR impacts GDP or not

$H_0: \beta_2 = 0$ (DIR does not impact on GDP)

$H_1: \beta_2 \neq 0$ (DIR impacts on GDP)

T-statistic is used to test. With number of observations (n) =15, number of variables (k) = 3, and significance level (α) = 0.05, the result of T is 1.631598 < $t_{\alpha/2}^{(n-k)} = 2.179$.

The above result indicates that H_0 is not rejected. There is insufficient evidence to conclude that the explanatory variable DIR impacts on the explained variable GDP.

Hypothesis 3: Whether IND impacts GDP or not

$H_0: \beta_3 = 0$ (IND does not impact on GDP)

$H_1: \beta_3 \neq 0$ (IND impacts on GDP)

T-statistic is used to test. With number of observations (n) =15, number of variables (k) = 3, and significance level (α) = 0.05, the result of T is 7.120502 > $t_{\alpha/2}^{(n-k)} = 2.179$.

The result indicates that H_0 is rejected, thereby confirming that explanatory variable IND has positive effect

on explained variable GDP.

Hypothesis 4: Whether IND has a more positive impact on GDP than DIR or not.

H₀: $\beta_3 - \beta_2 \leq 0$ (The impact of IND on GDP is not more positive than the impact of DIR)

H₁: $\beta_3 - \beta_2 > 0$ (The impact of IND on GDP is more positive than the impact of DIR)

By the means of Eviews 10.0, the value of $cov(\hat{\beta}_3, \hat{\beta}_2)$ is determined at -1.880257.

$$se(\hat{\beta}_3 - \hat{\beta}_2) = \sqrt{1.041738^2 + 1.907123^2 - 2 * (-1.880257)} = 2.912533$$

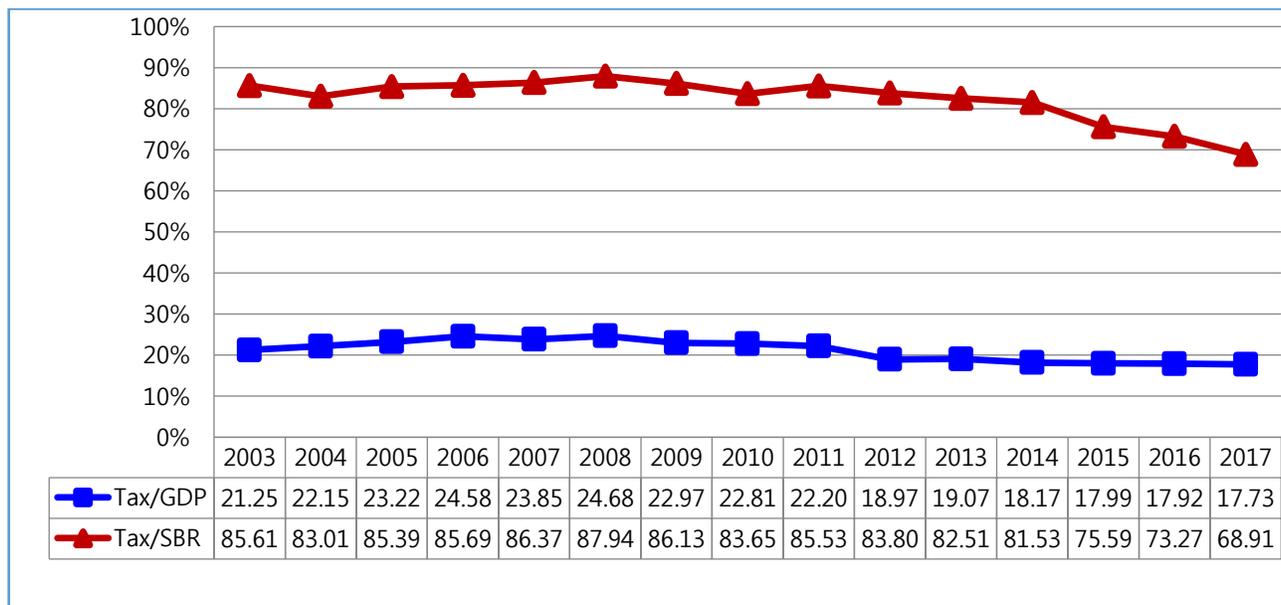
T-statistic is used to test. With number of observations (n) =15, number of variables (k) = 3, and significance level (α) = 0.05, the result of T is $(7.417698 - 3.111658)/2.912533 = 1.478452 < t_{\alpha/2}^{(n-k)} = 2.179$.

Accordingly, there has not been enough evidence to reject H₀, which means that there has insufficient evidence to confirm H₁. The data about direct tax and indirect tax of Vietnam in the period 2003-2017 is not sufficient to confirm that indirect tax has a more positive impact on Vietnam's economic growth.

In conclusion, the results of statistical hypothesis tests reveal that the tax revenue and indirect tax have positive effect on economic growth of Vietnam while the influence of direct tax on the economy is invisible. There has been insufficient evidence to conclude that indirect tax has a more positive impact on the economy of Vietnam than direct tax does.

4. Discussions

Tax is the main revenue source of Vietnamese state budget. The average contribution to the state budget revenue from all kinds of tax for the period 2003-2017 was 82.3%. Since 2011, tax-to-state budget revenue ratio has tended to decrease. The average tax-to-GDP ratio for the period 2003-2017 was 21.2%, and gradually decreased over the years (see Figure 1). The reduction of tax-to-GDP ratio and tax-to-state budget revenue ratio aims to allocate more resources to private sectors, thereby promoting higher and more sustainable economic growth. Along with the reformation of tax policies, Vietnam's tax administration mechanism also has positive results. The score for paying taxes in Vietnam has been improved significantly in recent years, 2015: 43.61, 2016: 45.41, 2017: 49.39. Tax administrative procedures are modernized by the application of information technology, thereby reducing the time spent for tax declaration and payment (the number of hours spent on tax and social insurance payment in 2015: 872 hours/year, 2016: 770 hours/year and 2017: 540 hours/year) and creating favourable conditions for taxpayers. The results of statistical tests for the period 2003-2017 show that tax had a positive impact on Vietnam's economy. This result is consistent with the study of Rahl (2015); Ogundana et al. (2017); Gashi et al. (2018).



Source: The Ministry of Finance of Vietnam

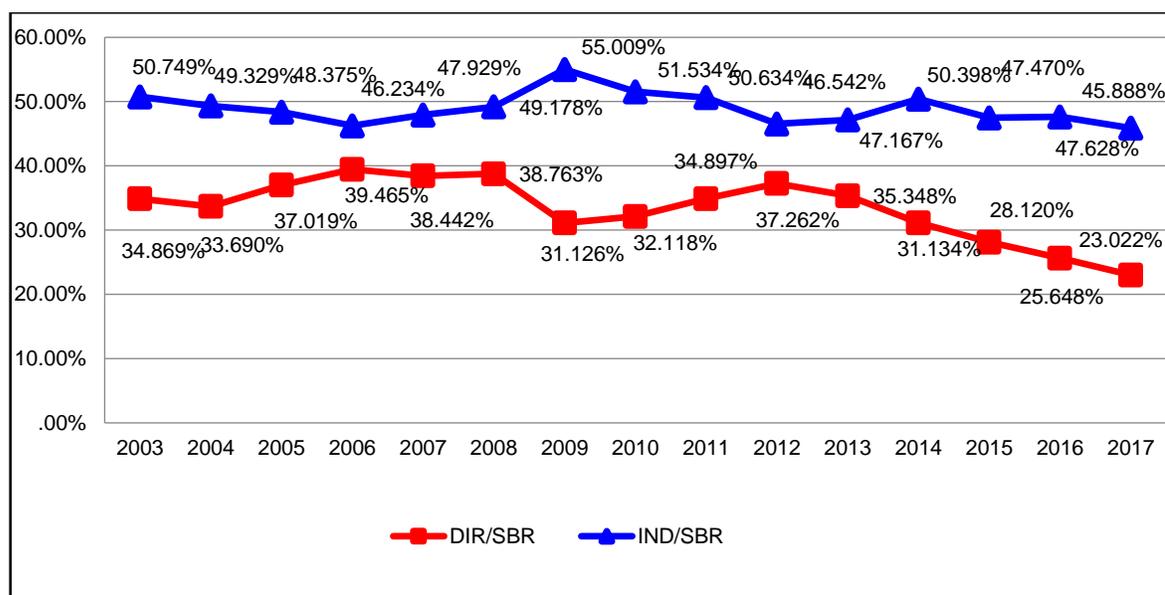
Note: (i) Tax/GDP: Tax-to-GDP ratio

(ii) Tax/SBR: Tax-to-state budget revenue ratio

Figure 1: Tax-to-GDP ratio and tax-to-state budget revenue ratio

In Vietnam, direct tax includes corporate income tax, personal income tax, registration tax, land and housing tax and agricultural land-use tax. Direct tax accounted for an average of 40.4% of tax revenue for the period 2003-2017. Although there is an increase in quantity, the proportion of direct tax in tax revenue tends to decrease, especially from 2012 to the present. Considering the relationship with the

state budget revenue, direct tax-to-state budget revenue ratio also reduces to 23% in 2017 (see Figure 2). The main reason is due to the decrease in corporate income tax revenue and the increase in indirect tax revenue. The statistical tests show that direct tax has an invisible impact on Vietnam's economic growth.



Source: The Ministry of Finance of Vietnam

Note: (i) DIR/SBR: Direct tax-to-state budget revenue ratio

(ii) IND/SBR: Indirect tax-to-state budget revenue ratio

Figure 2: Direct tax-to-state budget ratio and indirect tax-to-state budget ratio

Corporate income tax is the main direct tax of Vietnam. Law on Corporate income tax of Vietnam was firstly issued in 1997 to replace Law on Income. Corporate income tax has an important contribution to the state budget collection. Before 2013, the corporate income tax was kind of tax having the largest tax revenue. On average, during the period 2003-2017, the corporate income tax contributed 32.6% of tax revenue and 80.2% of direct tax revenue of Vietnam (see Figure 3). However, the corporate income tax has decreased in both quantity and proportion in tax revenue and state budget revenue. The main reason is that Vietnamese government has reduced the corporate income tax standard rate (see Table 2). Vietnam's corporate income tax rate is currently at the middle level in Southeast Asia, lower than Philippines (30%), Indonesia (25%), Myanmar (25%), Malaysia (24%); similar to Thailand and Cambodia (20%); but higher than Singapore (17%). Recently, the number of newly established enterprises in Vietnam has increased significantly (2013: 76,955 enterprises, 2014: 74,842 enterprises, 2015: 94,754 enterprises, 2016: 110,100 enterprises, 2017: 126,859 businesses), but not yet compensated for the reduction in revenue due to tax rate reduction. Moreover, the application of many preferential

measures through exemption and reduction of taxes for a long period of time to encourage new establishment of enterprises and support the development of enterprises also hinders the increase in corporate income tax revenues.

In contrast to the corporate income tax trend, personal income tax has a rapid increase in revenue, hence, personal income tax has gradually become one of Vietnam's major taxes. In 2003, personal income tax only contributed 2.6% of tax revenue of Vietnam, but it increased and reached 9.1% in 2017. For the period 2003-2017, personal income tax accounted for 5.3% of total revenue on average. Personal income tax contributed an average of 13.6% of direct tax revenue during the studied period (see Figure 3). Corporate income tax and personal income tax accounted for 93.7% of Vietnam's direct tax revenue. The history of personal income tax shows that the highest personal income tax rates have been decreased from 60% (1994) to 50% (1999), 40% (2004) and 35% (from 2009 to present). Compared with other countries in Southeast Asia, the personal income tax rate of Vietnam is similar to the rate of Thailand (35%), Philippines (35%), higher than the rate of Indonesia (30%), Malaysia (28%), Myanmar (25%), Singapore (22%).

Table 2: The standard corporate income tax rates of Vietnam

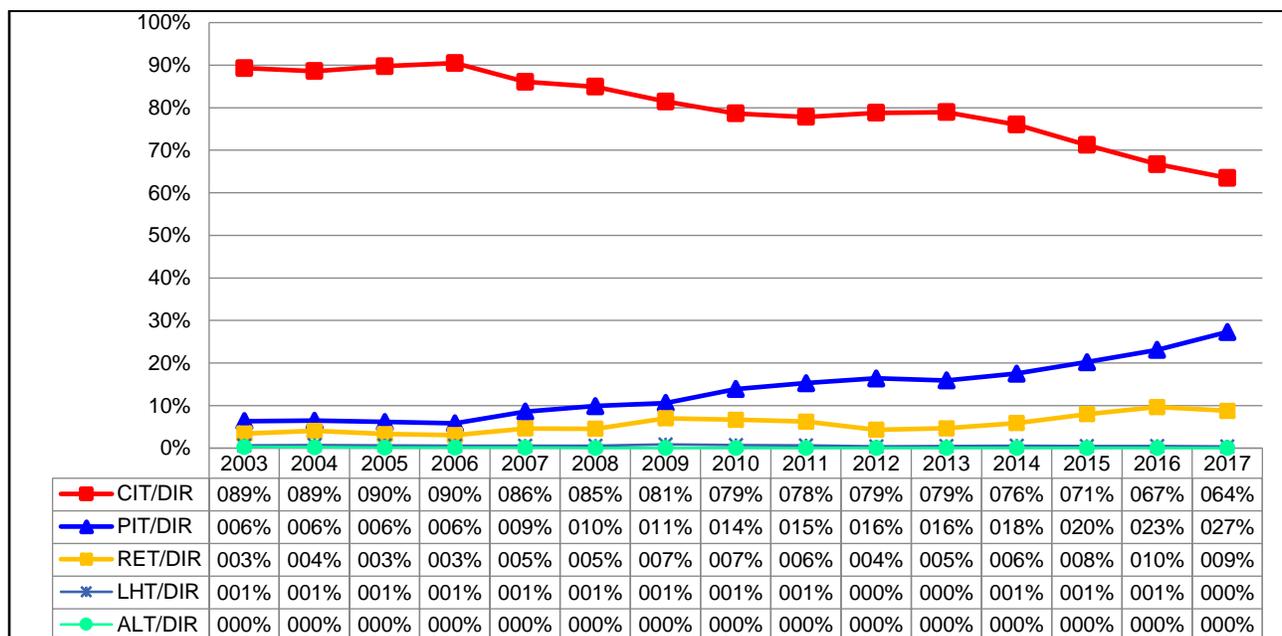
Period	Standard tax rate	Legal basis
From 01 January 1999 to 31 December 2003	32%	Law No. 57-L/CTN dated 10 May 19917
From 01 January 2004 to 31 December 2008	28%	Law No. 09/2003/QH11 dated 17 June 2003
From 01 January 2009 to 31 December 2013	25%	Law No. 14/2008/QH12 dated 03 June 2008
From 01 January 2014 to 31 December 2015	22%	Law No. 32/2013/QH13 dated 19 June 2013
From 01 January 2016 onwards	20%	Law No. 32/2013/QH13 dated 19 June 2013

Source: Summarized from Laws on Corporate income tax of Vietnam

Registration tax is applied to organizations and individuals registering their ownership and right to use of assets in accordance with the regulations, such as houses, land, cars, motorbikes, ships, boats, aircrafts, etc. with competent state agencies. The registration tax has relatively stable revenue and tends to increase. However, the contribution of registration tax in tax revenue is not large, accounted for 2.2% on average for the period 2003-2017. The registration tax ranks the third in terms of proportion in direct tax, following the corporate income tax and personal income tax (see Figure 3). The revenue of registration tax now has room to increase because people own more assets as a result of higher living standards.

Law on land and housing tax regulates revenues related

to the right to use residential land, productive land, and non-agricultural business. Law on agricultural land-use tax regulates revenues related to the use of land for agricultural purposes. Revenue from both land and housing tax and agricultural land-use tax, especially agricultural land-use tax, are small (see Figure 3). The land and housing tax contributed an average of 0.6% of direct tax revenue and 0.2% of tax revenue during the period 2003-2017. The agricultural land-use tax has very small revenue, accounting for 0.031% of tax revenue and 0.075% of direct tax during the period 2003-2017. The main reason of such small revenue from agricultural land-use tax is that Vietnam applies tax exemption and reduction policies and low tax rates to encourage agricultural production.



Source: The Ministry of Finance of Vietnam

Note: (i) CIT/DIR: Corporate income tax-to-direct tax revenue ratio

(ii) PIT/DIR: Personal income tax-to-direct tax revenue ratio

(iii) RET/DIR: Registration tax-to-direct tax revenue ratio

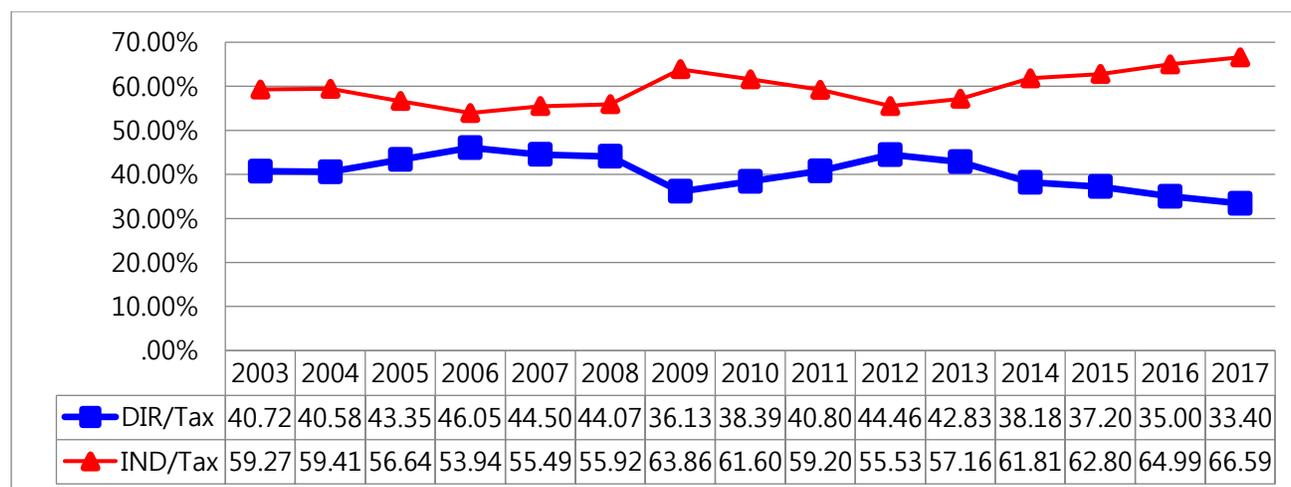
(iv) LHT/DIR: Land and housing tax-to-direct tax revenue ratio

(v) ALT/DIR: Agricultural land-use tax-to-direct tax revenue ratio

Figure 3: Proportion of revenues from types of direct tax in direct tax revenue

Indirect tax of Vietnam includes VAT, import-export tax, excise tax, environmental protection tax and natural resources tax. The indirect tax has a major contribution to state budget revenue, accounting for 48.9% on average, for the period 2003-2017 (see Figure 2). The indirect tax made up an average of 59.6% of tax revenue during the studied period. In comparison with direct tax, the indirect tax accounts for a larger proportion and tends to increase (see

Figure 4). This confirms the advantage of indirect tax in mobilizing financial resources to meet the spending needs of the government. The statistical tests show that indirect tax is statistically significant and has a positive impact on Vietnam's economic growth. These results are in line with the researches of Macek (2014); Ogundana et al. (2017); Owino (2018) etc.



Source: The Ministry of Finance of Vietnam

Note: (i) DIR/Tax: Direct tax-to-tax revenue ratio

(ii) IND/Tax: Indirect tax-to-tax revenue ratio

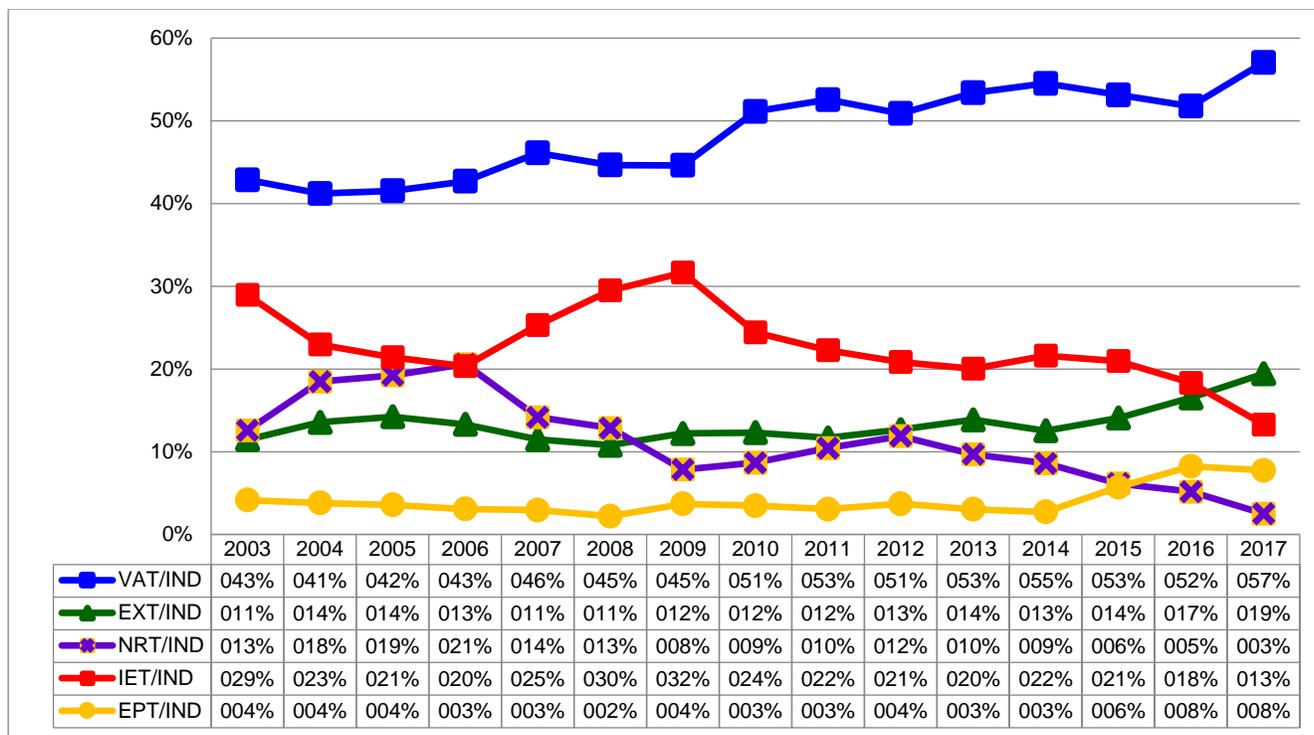
Figure 4: Indirect tax-to-tax revenue ratio and direct tax-to-tax revenue ratio

The most outstanding tax of not only indirect tax but also the tax system of Vietnam is VAT. VAT has been applied since 1999 and replaced Law on Sales tax. VAT is a broadly-based tax, assessed on added value of goods and services arising in the process from production, circulation to consumption. VAT passes the corporate income tax and becomes the largest contributor to the state budget, accounting for 23.7% for the 2003-2017 on average. In 2017, VAT accounted for 26.2% of the state budget revenue, much higher than the proportion of corporate income tax (14.6%). VAT currently accounts for 38.0% of tax revenue and 57.0% of Vietnam's indirect tax (see Figure 5). The current Vietnam's VAT standard rate is 10%, in addition to other tax rates of 0% and 5% applicable to some specific goods and services. Some goods and services are not subject to VAT. Although from the taxpayers' perspective, VAT is less fair than the corporate income tax and personal income tax, it is easier to collect VAT and there is more room to increase VAT revenue in Vietnam.

Import-export tax is applied to imports to and exports from Vietnam. This kind of tax is closely linked to international trade. Along with Vietnam's tendency of international integration, the contribution of import-export tax in the state budget revenue decreases accordingly. In 2003, it accounted for 14.7% of the state budget revenue,

but in 2017 only accounted for 6.1%. The average proportion for the period 2003-2017 was 11.2%. Import-export tax currently ranks the third important contributor to state budget revenue among indirect taxes, following VAT and excise tax (see Figure 5). The reduction in revenues from the import-export tax are mainly due to Vietnam's tariff reductions under international trade agreements. This trend is in line with Vietnam's economic development strategy that encourages international trade.

In Vietnam, goods that are not encouraged to consume due to adverse health effects (alcohol, beer, tobacco, etc.), or luxury goods and services which are consumed by a small group of the rich (aircraft, yachts, golf, etc.) or socially-sensitive services (disco, casino, prize-winning electronic games, lottery, etc.) are subject to special consumption tax. The tax rates applied to these goods and services are much higher than normal. Excise tax has a steady increase in revenue over the years and gradually becomes a kind of tax that contributes positively to the state budget. In 2017, excise tax passed the import-export tax and contributed 8.9% of the total state budget revenue, 19.4% of indirect tax revenue (see Figure 5). The revenue of excise tax also has a good room to increase because of higher consumption of goods and services subject to excise tax along with the development of the economy.



Source: The Ministry of Finance of Vietnam

- Note: (i) VAT/IND: VAT-to-indirect tax revenue ratio
 (ii) EXT/IND: Excise tax-to-indirect tax revenue ratio
 (iii) NRT/IND: Natural resources tax-to-indirect tax revenue ratio
 (iv) IET/IND: Improt-export tax-to-indirect tax revenue ratio
 (v) EPT/IND: Environmental protection tax-to-indirect tax revenue ratio

Figure 5: Proportion of revenues from types of indirect tax in indirect tax revenue

Goods causing adverse environmental impacts such as gasoline, oil, coal, plastic bags, herbicides, hydrogen-chloro-fluoro-carbon (HCFC), etc. will be subject to environmental protection tax. The environmental protection tax does not only have an economic significance but also contributes to the improvement of social responsibility and awareness of environmental protection which is a problem that Vietnam is particularly concerned about, and encourages production, consumption of environmentally friendly goods. Revenues from environmental protection tax have increased in recent years, accounting for 2.0% of the state budget revenue during the period 2003-2017 on average. The environmental protection tax revenue currently accounts for 7.7% of indirect tax revenue. The environmental protection tax is gradually becoming an effective economic tool to contribute to environmental management and protection in Vietnam.

Natural resources tax applies to organizations and individuals exploiting natural resources in accordance with the regulations such as minerals, crude oil, natural gas, coal gas, natural water, natural seafood, etc. The natural resources tax is an economic tool that contributes to the management of natural resource exploitation. However, the amount of natural resources tax is currently small and on the trend to decrease. The natural resources tax-to-state budget

revenue was the highest in 2006 (9.5%), but decreased to 1.2% in 2017. The natural resources tax accounted for an average proportion of 4.1% of indirect tax for the period 2003-2017 (see Figure 5).

5. Conclusions

This research uses ordinary least-squares regression method to test the impact of direct tax and indirect tax on economic growth of Vietnam. The statistical data is obtained from the Ministry of Finance of Vietnam for the period 2003-2017. The test results indicate that tax has a positive impact on the economic growth of Vietnam. The influences of indirect tax and direct tax on the economy are different. Indirect tax has positive effect on economic growth, whereas direct tax has invisible impact on the economic growth of Vietnam. The test results also show that there has not been sufficient evidence to conclude that indirect tax has more influence on the economy than direct tax. Vietnamese tax system should be reformed to promote a sustainable economic growth.

6. Recommendations

With the aim of increasing the positive impact of the tax system on Vietnam's economic growth and on the basis of empirical tests, some policy suggestions are proposed as follows:

Firstly, continuing to harmonize direct tax with indirect tax to mobilize the financial resources timely and sufficiently to meet the spending needs of the government. Restructuring the tax system of Vietnam towards increasing the proportion of indirect tax and reducing the proportion of direct tax.

Secondly, expanding tax base, avoiding base erosion and profit shifting. At the same time, reforming tax administration, strengthening the application of information technology in tax administration to facilitate taxpayers and reduce tax losses.

Thirdly, reducing corporate income tax rates towards giving priority to small and medium-sized enterprises to create a driving force to promote the establishment of new enterprises and improvement of production and business capacity. Reducing personal income tax rates to increase employment and creativity motivation in laborers.

Fourthly, increasing the tax rates of environmental protection tax and natural resources tax to improve the effectiveness of the state management on environment and resources. Increasing excise tax rates on goods which are harmful to consumers' health and the environment to mobilize resources for the state budget and lead consumers' behaviour.

Fifthly, adjusting VAT policy towards applying a single tax rate and increasing the standard VAT rate so that VAT is a major tax of Vietnam.

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