

DETERMINANTS OF TRANSFER PRICING AGGRESSIVENESS: A CASE OF VIETNAM

Nguyen Huu Anh,
Nguyen Thanh Hieu,
Doan Thanh Nga

ABSTRACT

Transfer pricing in the direction of transferring profits will cause the country to lose a significant source of revenue from the corporate income tax, nullifying some of its legal right to tax on its business. Transfer pricing is a matter of global concern to all nations in the world. The purpose of this article is to study the factors affecting the transfer pricing aggressiveness of enterprises in Vietnam. A number of studies around the world have addressed the determinants of transfer pricing aggressiveness in countries such as Australia, the United States, and Indonesia, but the results of these studies have been inconsistent in the factors that affect transfer pricing aggressiveness. This study was conducted in Viet Nam, using the data of 180 companies in Vietnam, using the OLS regression method. The results show that the six factors are: enterprise size (SIZE) Intangible assets (INTANG), leverage (LEV), proportion of the number of affiliated companies abroad in the total number of affiliated companies (MULTI), the characteristics of the corporate headquarters in the tax havens countries (TAXHV) are determinants that affect transfer pricing aggressiveness in enterprises in Vietnam.

Key words: transfer pricing aggressiveness, transfer pricing, determinants, tax obligation.

1. INTRODUCTION

It can be said that the "fight" between anti-price transfer and price behavior of foreign direct investment (FDI) enterprises as a contradiction without end. For enterprises, in order to carry out price transfer, they use a variety of tactics that are diverse, sophisticated, and even costly to hire a specialized professional company on price transfer for advice on transfer pricing. For the tax authorities of the host country, tax authorities must seek effective measures to control transfer pricing including investing modern management systems, databases, interdisciplinary collaboration, and inspection. Different countries in the world have taken measures to control transfer pricing. For example, the United Kingdom (UK) could control transfer pricing by controlling over debt ratios. According to a research conducted by PWC (2017), the UK has general legislation enables HMRC to challenge the deductibility of interest paid by a UK company on a loan from a related party for which the interest rate is excessive or the amount of the loan itself is excessive. The measure for determining whether the amount of the loan or the interest rate is excessive is the arm's-length principle - that is, whether a third party would have loaned the company that amount of money or at that interest rate.

However, when the state offers a new transfer pricing control tool, the business takes other measures to cope. Thus, transfer pricing aggressiveness, as a popular economic phenomenon driven by globalization, creates a conflict of interest between FDI enterprises and the host country. These negative effects are not limited to the scope of the economic interests but sometimes they can become complex socio-political issues.

For developing countries, the negative effects are likely to be more pronounced on a larger scale. If the FDI receiving country does not have effective solutions to control transfer pricing of FDI enterprises, the benefits of FDI attraction are seriously compromised.

In recent years, the situation of poor business performance of large enterprises and corporations, especially FDI enterprises operating in Vietnam is quite popular. According to statistics of Vietnamese General Department of Taxation (2016), in the period 2013 - 2015, 31.5% of FDI enterprises declared losses (accounting for 15.8% of the total number of FDI enterprises operating in Vietnam). But there is a paradox that when the FDI enterprises claim losses, the same industry domestic companies in the country are profitable. In addition, despite such continuous losses and poor business performance, most of these enterprises still expand the size of business. That is the indicator of transfer pricing aggressiveness of enterprises in Vietnam, which causes the tax avoidance, unhealthy competition, inequality between FDI enterprises and domestic enterprises, negatively affecting the prestige of enterprises and the image of enterprises to investors and general public.

Therefore, the study of transfer pricing aggressiveness and determinants of transfer pricing aggressiveness are of great significance and are indeed necessary for state management agencies to detect companies conducting transfer price manipulation, thereby creating an environment of equal competition for all businesses, creating public confidence in all countries in the world. The purpose of this study was to contribute to the transfer pricing theoretical framework by extending the argument about the transfer pricing aggressiveness and providing evidence of main factors affecting transfer pricing aggressiveness of enterprises.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Factors influencing transfer pricing include: company size, business performance, capital structure, intangible asset, existence of multinational affiliates, and the existence of transactions with related parties in the tax havens as detailed in Figure 1.

(i) *Factor 1: Company size*

Large-sized companies often conduct business and financial transactions more than small-sized companies, so large companies can easily take advantages of lower income taxes (Rego, 2003). Larger companies will have more transactions with companies in their affiliated relationships such as leasing of assets at preferential prices, arranging loan contract. Large companies are often given incentives on corporate income tax rates, which are different from other companies. In addition, Mills et al. (1998) and Slemrod (2001) argue that large companies have different average income tax expenses than other companies. Research by Hanlon et al. (2007) shows that large companies are often entitled to tax incentives and a significant reduction in the amount of tax payable relative to the actual amount of tax payable. In addition, the study by Benvignati (1985), Al-Eryani et al. (1990) and Conover and Nichols (2000) also indicate that large companies carry out the transfer pricing. To examine the impact of firm size on transfer pricing aggressiveness, the following hypothesis is proposed:

Hypothesis 1: Firm size is positively associated with transfer pricing aggressiveness in Vietnam

(ii) *Factor 2: Profitability*

Firms with high profit results tend to find ways to reduce the tax liability (Rego, 2003). In addition, the study by Wilkie (1998) and Wilkie & Limberg (1993) also shows that there is a link between the pre-tax earnings and the effective tax rate. According to Rego (2003), the more taxable companies are the more tax evasion the taxpayers occur. From a transfer pricing perspective, companies can adjust their prices to reduce their taxable income in places with high corporate tax rates, and vice versa, they will adjust prices to increase profits where tax rates are low. According to Grubert & Mutti (2007), Womack & Drucker (2011); Duhigg & Kocieniewski (2012), multinational corporations with super profits like Apple, Google and Microsoft will tend to transfer profits to countries with low corporate income tax rates and will clamor large royalty payments (for example, royalty fees) for companies operating in countries where corporate income tax rate is high, which will result in reduced taxable profits. To examine the impact of business results on transfer pricing aggressiveness in Vietnam, following hypothesis is proposed:

Hypothesis 2: Profitability is positively associated with transfer pricing aggressiveness in Vietnam

(iii) *Factor 3: Capital structure or firm leverage*

Studies by Hines (1996); Richardson et al. (1998); Newberry & Dhaliwal (2001); Rego (2003); Dyreng et al. (2008) noted that companies using large amounts of debt in total capital were aware of how these companies benefited from the use of business loans. Bernard et al. (2006) found that firms using more debt than equity tended to be more transfer pricing aggressiveness than less leveraged firms. According to studies by Hines (1996) and Rego (2003), in general, companies tend to use loans in countries with high tax rates and vice versa, companies tend to use equity in countries with low tax rates. As such, corporate affiliates often have large internal lending transactions (Richardson et al., 1998). Thus, the use of debt as a source of capital is the way corporations use to reduce tax liabilities. To examine the impact of the capital structure (expressed in the debt-to-total capital ratio) on transfer pricing aggressiveness in Vietnam, following hypothesis is proposed

Hypothesis 3: Firm leverage is positively associated with transfer pricing aggressiveness in Vietnam

(iv) *Factor 4: Intangible Assets*

The issue that is mentioned quite often related to transfer pricing aggressiveness is transfer of intangible fixed assets between affiliates to achieve transfer pricing goals. Intangible assets that are often transferred within the group such as the transfer of intellectual property and transfer of research & development expenses (Grubert, 2003; Grubert & Mutti, 2007; Gravelle, 2015). Because intangible assets are often difficult to quantify on the market price principle, affiliated companies easily take advantage of this to carry out transfer pricing aggressiveness. Grubert & Mutti (2007) states that transfer pricing aggressiveness for intangible asset occurs because these assets are large but difficult to evaluate and these assets play an important role in business operation.

According to a study by Hanlon et al. (2007), the average transaction costs associated with transferring intangible assets significantly contributes to the transfer of profits between interrelated companies internationally. There is no denying the distinctive features of intangible fixed assets and the difficulty of valuing them because there is no market for the operation of similar intangible fixed assets. Therefore, the intangible asset valuation is subjective by affiliated companies. Thus, transfer pricing is usually made through the transfer and reception of the value of special intangible assets that usually occurs in affiliated companies with differences in the corporate income tax rates (Shackelford et al., 2007; Dyreng et al., 2008). For these reasons, following hypothesis is proposed:

Hypothesis 4: Intangible assets are positively associated with transfer pricing aggressiveness in Vietnam

(v) *Factor 5: The existence of multinational companies (Multi-nationality)*

Foreign companies doing business in a particular country are often entitled to tax incentives (Rego, 2003, Hanlon et al., 2007). For example, a multinational corporation that is receiving tax exemptions in a particular country will seek to shift its group's profits to the country where the tax exemptions are available in order to reduce the tax payable by the entire group. According to a study by Rego (2003), multinational corporations have the opportunity to be exempted from corporate tax obligations rather

than domestic companies because multinational corporations have transactions involving many different countries in the world and will take advantage of tax incentives better than domestic companies.

According to Mills & Newberry (2004), multinational corporations will, on average, enjoy lower tax rates for their affiliates as they do business in the United States (US) rather than operating in other countries outside US. Corporations with affiliated companies abroad are more likely to have double transfer pricing aggressiveness risk than non-affiliated corporations. Sharing opinion with Mills & Newberry (2004), a study by Dyreng & Associates (2008) found that corporations with affiliated companies abroad often commit acts of tax evasion. Benvignati (1985) also notes that the group who has large number of oversea affiliates will have more change to perform transfer pricing aggressiveness. Finally, Jacob (1996) also points out that US multinationals often make a transfer by taking advantage of the difference in US tax rates with those of non-U.S. To test the influence of multinational factors of the affiliated companies in the group affecting transfer pricing aggressiveness in Vietnam, following hypothesis is proposed:

Hypothesis 5: Multi-nationality is positively associated with transfer pricing aggressiveness in Vietnam.

(vi) Factor 6: Tax havens

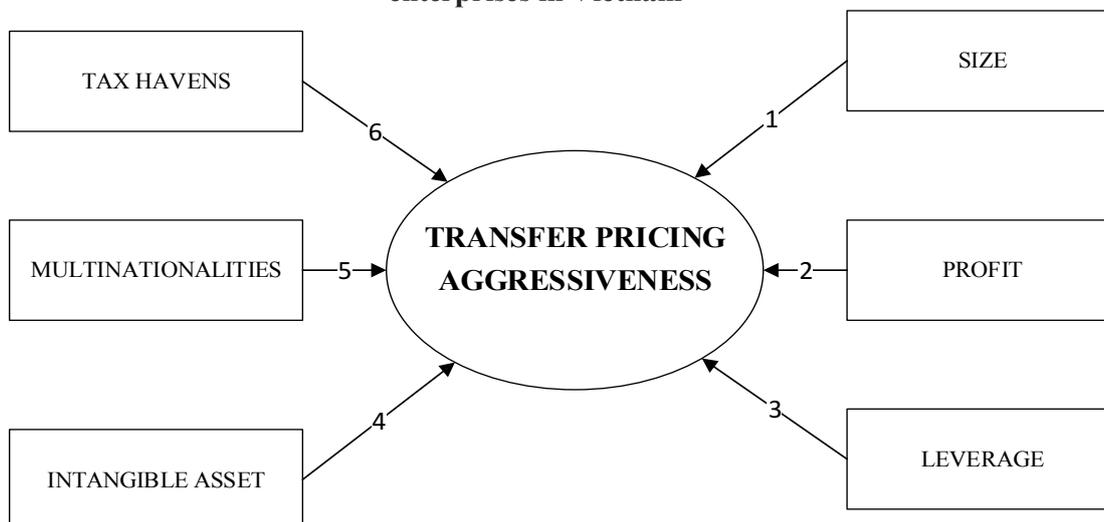
The countries in which the government provides preferential treatment in terms of financial, taxation and tax policies for enterprises conducting business activities are called tax havens. These tax havens sometimes have no tax or very low taxes on businesses. The establishment of affiliated companies located in tax havens will give companies the opportunity to transfer their prices and transfer profits to the company in a tax haven to reduce the tax liability.

In these tax havens, it is possible for companies to reallocate their taxable profits between countries (Desai et al., 2006). In particular, taking advantage of the tax havens, multinational corporations will sell their goods to their affiliates in tax havens to generate high profits but don't pay taxes. It will also transfer the value of the goods or the group's expenses from this tax haven to countries with high tax rates because of the high costs of reducing taxable profits and avoiding paying taxes. According to Haris & Associates (1998), the tax liability that corporations pay in the US is lower if they have associates based in tax havens. In addition, the formation of associates in tax havens countries is one of the main objectives of the group and plays a very important role in the group's operations (Slemrod & Wilson, 2009). To test the role of tax havens utilization in the transfer pricing aggressiveness of associated companies in Vietnam, following hypothesis is proposed:

Hypothesis 6: Tax haven utilization is positively associated with transfer pricing aggressiveness in Vietnam

In summary, factors affecting transfer pricing aggressiveness in Vietnam will be shown in Figure 1.

Figure 1: Factors affecting transfer pricing aggressiveness of enterprises in Vietnam



(Source: Synthesized by the research team)

3. RESEARCH METHODOLOGY

3.1. Sample selection and research data selection

Data used in this paper was collected from enterprises located in 09 provinces/cities of Vietnam: Hanoi, Ho Chi Minh City, Dong Nai, Binh Duong, Ba Ria - Vung Tau, Da Nang, Khanh Hoa, Hai Phong and Hung Yen. These are the 09 largest

provinces/ cities in Vietnam, concentrated in industrial zones and large corporations (especially FDI enterprises). Financial institutions, insurance companies, credit institutions and companies without overseas affiliates are not included in the sample.

Data was hand-collected by the research team from the source of financial statements of enterprises provided by the provincial tax departments. The data collection was performed during the period from June 2017 to June 2018. After excluding insurance companies, credit institutions and companies without overseas affiliates, the total sample size used was 180 companies, as the financial statements of year 2016 were used.

3.2. Research model

In this study, the relationship between dependent variable and independent variables is presented using the regression model which was created by Richardson et al. (2013).

$$TP_{i,t} = \alpha_{0i,t} + \beta_1 SIZE_{i,t} + \beta_2 PROFIT_{i,t} + \beta_3 LEV_{i,t} + \beta_4 INTANG_{i,t} + \beta_5 MULTI_{i,t} + \beta_6 TAXHV_{i,t} + \varepsilon_{i,t} \quad (1)$$

Dependent variable and independent variables used in the model are shown in Table 1 and Table 2 below:

Table 1: Describe independent variables in the model and how to measure the variables

Variables		Measurement
Independent Variables	SIZE	Firm size: Measured by the natural logarithm of total assets
	PROFIT	Business results: Natural logarithm of profit before corporate income tax
	LEV	Debt structure in total assets (measured by the total value of long-term debt / total assets)
	INTANG	Value of intangible fixed assets: measured by the natural logarithm of intangible fixed assets
	MULTI	Total number of company's foreign subsidiaries divided by total number of company's subsidiaries
	TAXHV	A dummy variable (1 for the entity with at least one subsidiary company incorporated in an OECD (2006) listed tax haven, otherwise 0)

(Source: Synthesized by the research team)

According to OECD (2006), there are 33 countries of tax havens: Anguilla, Antigua and Barbuda, Bahamas, Bahrain, Bermuda, Belie, British Virgin Islands, Cayman Islands, Cook Islands, Cyprus, Dominica, Gibraltar, Grenada, Guernsey, Isle of Man, Jersey, Liberia, Marshall Islands, Mauritius, Montserrat, Nauru, Netherlands Antilles, New Caledonia, Panama, Samoa, San Marino, Seychelles, St.Lucia, St.Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Turks and Caicos Islands and Vanuatu.

Table 2: Describe the dependent variable in the model and variable measurement

Variable	Measurement	
Dependent Variable	TP	Each enterprise will have its own TP value (used to measure transfer pricing aggressiveness in Vietnam) by adding up the sum of the eight signs as mentioned below (value maximum is 8) and divided by the total number of signs found for the joint that. The TP value was transfer from a range of 0 - 8 to percent format.
		1. The existence of interest-free loans between related entities
		2. The existence of debt forgiveness between related entities
		3. The existence of impaired loans between related entities.
		4. The provision of non-monetary consideration without commercial justification
		5. The absence of formal documentation to support selection of appropriate arm's-length methodologies or the formal documentation regarding related parties transactions
		6. The disposal of capital assets to related entities without commercial justification
		7. The absence of arm's-length justification for transactions between related entities
	8. The transfer of losses between related entities without commercial justification.	

(Source: Synthesized by the research team)

Signs describing transfer pricing aggressiveness used in this paper are based on the Australian Taxation Office - ATO (2005) and the Australian Securities and Investment Commission - ASIC (2010): the appearance of non-intrinsic-commercial in nature), not in line with arm's-length principles or the company does not provide proof of these transactions. Also, as the previous studies conducted, the higher the value of TP is measured, the higher the level of the transfer pricing aggressiveness, and vice versa.

This paper review of data in the financial statements in conjunction with the explanatory notes to the financial statements as follows:

(1) *The existence of interest-free loans between related entities.*

Identification signals through the review of the financial statements on the value of receivables and the value of the debt between related parties. If the loan agreement between the parties associated links that this is a loan without interest, then this can be considered as the transfer pricing aggressiveness and so the TP variable in the research model will receive the value of 1, otherwise the TP variable will receive a value of 0.

(2) The existence of debt forgiveness between related entities

Identification signals through the review of the financial statements on the value of receivables and the value of the debt between related parties. If the loan agreement between the parties is not associated with the terms of the borrower is obliged to repay the loan, then this can be considered as the transfer pricing aggressiveness and so the TP in the research model will receive a value of 1, otherwise the TP variable will receive a value of 0.

(3) The existence of impaired loans between related entities.

Signal of recognition through the review of financial statements on the value of receivables and the value of liabilities between related parties. If there is a transaction related to the debt write-off receivable or payable between affiliated parties, then such can be considered as transfer pricing aggressiveness and so the TP in the research model will receive a value of 1, otherwise the TP variable will receive a value of 0.

(4) The provision of non-monetary consideration without commercial justification

Signal of recognition through the review of financial statements of the service providers or the provision of non-monetary assets between related parties. If these operations are not explained properly by the company on the basis of the market price principle, then it can be considered as transfer pricing aggressiveness and so the TP in the model will get value of 1, otherwise TP variable will get value 0.

(5) The absence of formal documentation to support selection of appropriate arm's-length methodologies or the formal documentation regarding related parties transactions

Identification signals through a review of the company's policy on financial statements applicable to intercompany transactions. If they are not given a fair policy on the basis of the market price principle, then it may be that can be considered as transfer pricing aggressiveness thus the TP in the research model will receive value of 1, otherwise the TP variable will receive a value of 0.

(6) The disposal of capital assets to related entities without commercial justification

Identification signals through the review and disclosure of financial statements on asset trading between related parties. If these operations are not explained properly by the company on the basis of the market price principle, that can be considered as transfer pricing aggressiveness and so the TP in the model will study get value 1, otherwise TP variable will get value 0.

(7) The absence of arm's-length justification for transactions between related entities

Identification signals through the review of financial statements on transactions between related parties. If these operations are not explained properly by the company on the basis of the market price principle (such as considering the characteristics of the loan agreement) then it may be that can be considered as transfer pricing aggressiveness thus the TP variable in the research model will receive the value of 1, otherwise the TP variable will receive the value of 0.

(8) The transfer of losses between related entities without commercial justification.

Identification signals through the review of financial statements on transactions between related parties and considering the value of losses on the financial statements of the company because the company suffered a loss, the company is not required to pay corporate income tax. If there is a transfer of losses between affiliated companies then that can be considered as transfer pricing aggressiveness so the TP in the research model will receive the value of 1, reverse the variable TP will receive a value of 0.

4. RESULTS OF EMPIRICAL RESEARCH ON DETERMINANTS AFFECTING TRANSFER PRICING IN ENTERPRISES IN VIETNAM

4.1 Descriptive Statistics and Correlational Analysis

Statistical data collected from the research team show in Table 3 that in 180 firms, 32 companies (accounting for 18%) had loan transactions with related companies. The agreed interest rate for these loans is 0%. As for the debt write-offs for affiliates, in 180 companies, 23 companies made debt write-offs, accounting for 13%. At the same time, research data also show that in 180 companies, 19 companies (accounting for nearly 10%) appear to have implemented a debt-to-equity valuation. Notably, in the 180 companies, there are 54 companies (accounting for 30%) having property transfer transactions, providing non-market services.

In addition, there are 60 companies (33%) that do not provide evidence of how valuation of transferable assets and services or, in other words, the basis for determining transfer prices do not exist at all. this company. The results of the survey on the transparency of information related to transferring operations are in line with market principles, showing that 34 companies out of 180 companies (19%) cannot verify the transparency and objectivity in the determination of the value of asset transfers; and the presence of 60 companies (30%) of companies with agreements with affiliated parties unclear, not fully explain the basis of the agreement between the parties. Finally, when the team investigated the existence of loss-making operations among affiliates, it found that most of these operations were in line with regulations, only 6 out of 180 companies non-compliance loss, accounting for about 3%.

Table 3: Statistics describing the value of the signals associated with the transfer pricing aggressiveness

No.	The content of the transfer pricing aggressiveness signals	Mean (%)
1	The existence of interest-free loans between related entities	32
2	The existence of debt forgiveness between related entities	23
3	The existence of impaired loans between related entities.	19
4	The provision of non-monetary consideration without commercial justification	54
5	The absence of formal documentation to support selection of appropriate arm's-length methodologies or the formal documentation regarding related parties transactions	60
6	The disposal of capital assets to related entities without commercial justification	34
7	The absence of arm's-length justification for transactions between related entities	60
8	The transfer of losses between related entities without commercial justification.	6

(Source: Research Team)

Thus, based on the eight signals of transfer pricing aggressiveness used to determine the level of transfer pricing aggressiveness of companies, empirical evidences from the research showed that companies operating in Vietnam are showing signal of transfer pricing aggressiveness which are clearly indicated by signal No. 4, 5 and 7.

Table 4: Correlations analysis

	TP	SIZE	PROFIT	LEV	INTANG	MULTI	TAXHV
TP	1						
SIZE	0.0846	1					
PROFIT	-0.3641	0.3475	1				
LEV	0.0679	0.0315	0.0252	1			
INTANG	-0.5497	0.3599	0.3209	0.2129	1		
MULTI	0.3547	-0.0366	-0.13	-0.2074	-0.2982	1	
TAXHV	0.3593	-0.2033	-0.3215	-0.1668	-0.3667	0.0526	1

(Source: Results from data processing of Research Team)

The data in Table 4 shows that the factors that positively influence the price transfer aggressiveness are the size of the company, the nationality of the associated country abroad, and tax havens characteristic and capital structure of the company (leverage) while factors that are negatively influence the price transfer aggressiveness are profitability (performance of an enterprise) and intangible assets.

In summary, the results show that the greater the company's business result, the less the company is likely to transfer pricing aggressiveness. In addition, the greater the value of the company's intangible assets, the lower the transfer pricing aggressiveness. Finally, the greater the use of debt (leverage), the greater the likelihood of transfer pricing aggressiveness.

4.2 Experimental results of factors affecting transfer pricing aggressiveness

The paper has conducted tests related to validation and compliance with regression hypotheses (for example: constant variance, residual independence, no self-correlation). The fit of the model is determined by the p-value of the statistical F obtained after the estimation. The results obtained after regression (F-value = 22.18, Prob (F-statistic) = 0.000) less than 0.1 so that the model is the appropriate model. The hypothesis of constant variance was verified by the Breusch-Pagan-Godfrey test. Prob. F's value obtained after this test is more than 0.1, and then the model has constant variance. For the self-correlation hypothesis, apply the autocorrelation test with the Durbin - Watson coefficient (DW). The results obtained after regression shows DW = 2.17 means model has no self-correlation between variables.

The results obtained after analyzing the regression of the factors affecting the transfer showed that: p-value was less than 0.05. It indicated that the variables in the model are statistically significant. Observation of the Adj.R² value of the model showed a value of 0.4152 (41.52%) which indicated the factors used in the model (independent variable): SIZE (firm size), PPROFIT (business results); LEV (debt/ total assets), INTANG (intangible asset value), MULTI (number of affiliated companies abroad), TAXHV (tax havens utilizations) are able to account for 41.5% of variation in dependent variable (TP: transfer pricing aggressiveness) of companies in Vietnam.

Table 5: Results of regression model of factors affecting transfer pricing aggressiveness

Variables	Coefficient (Standardised)	Std.error	t-Value	P> t
Intercept	-0.7443222	34.066665	-2.18	0.030
SIZE	3.843242	1.313225	2.93	0.004
PROFIT	-0.5360425	0.168412	-3.18	0.002
LEV	18.20156	10.95791	1.66	0.099
INTANG	-1.461961	0.2269406	-0.644	0.000
MULTI	23.51698	6.733003	3.49	0.001
TAXHV	10.69586	3.936568	2.72	0.007
Adj. R ² (%)	0.4152			
F-value	22.18			
Prob>F	0.0000			
DW	2.17			
N	180			

(Source: Results from data processing of Research Team)

5. DISCUSSIONS

The results obtained after the OLS regression model of factors affecting transfer pricing aggressiveness showed that the Hypotheses 1, 3, 5 and 6 were accepted. Hypotheses 2 and 4 are rejected.

Hypothesis 1 "*Firm size is positively associated with transfer pricing aggressiveness in Vietnam*" has been accepted. The results of this study agree with the results of the study by Richardson, G., Taylor, G., & Lanis, R. (2013) conducted a study in Australia with data used in 2006; Waworuntu, S.R, Hadisaputra, R Pertanika (2016) studied in Indonesia with data from 2010 to 2012; Shackelford & Associates (2007). This further confirms that large-scale companies tend to regulate taxable income through transfer pricing.

Hypothesis 2 "*Profitability is positively associated with transfer pricing aggressiveness in Vietnam*" has been rejected. The regression results show that the business results are negatively correlated with the transfer pricing aggressiveness. The results of this study disagree with the results of the study by Rego (2003) and Womack & Drucker (2011); Duhigg & Kocienniewski (2012); Waworuntu, S.R, Hadisaputra, R Pertanika, 2016. According to Waworuntu, S.R., Hadisaputra, R Pertanika (2016), According to the authors Rego (2003) and Womack & Drucker (2011); Duhigg & Kocienniewski (2012), the more profitable the business will carry out transfer pricing behavior to reduce the amount of tax payable on the performance interest. However, in the context of Vietnam, the results of this quantitative analysis are relevant because through tax inspections, tax experts have pointed out that most multinational companies in Vietnam, have not been profitable since the beginning of business operations in Vietnam but they continue to expand their production and business (Mai Phuong, Nguyen Nga, 2018). Lotte Mart Vietnam, for example, is constantly reporting losses, but it is also continuing to expand its business model, prompting many to recall some of the "big" retailers in Vietnam. Suspected transfer pricing, April 2015, after 2 months of inspection, the tax authorities have requested to collect 507 billion from Lotte Mart

Hypothesis 3 "*Firm leverage is positively associated with transfer pricing aggressiveness in Vietnam*" has been accepted. This means that the large borrowers will also be likely to transfer pricing aggressiveness. This conclusion is consistent with the conclusions of previous studies (Newberry & Chaliwal, 2001; Richardson, G., Taylor, G., & Lanis, R., 2013; Waworuntu, SR, Hadisaputra, R Pertanika, 2016). This indicates that companies often make a transfer using the loan and the increase in interest expense to reduce taxable income and thus reduce the taxable income

Hypothesis 4 "*Intangible assets are positively associated with transfer pricing aggressiveness in Vietnam*" was rejected. Research results show that the value of intangible assets is negatively correlated with transfer pricing aggressiveness in Vietnam. The findings are consistent with the findings of Waworuntu, S.R, Hadisaputra, R Pertanika (2016) in Indonesia. In the research of Waworuntu SR, Hadisaputra, R Pertanika (2016), the value of intangible assets is measured by considering whether the affiliate parties pay royalties upon receipt of intangible assets when delivered or not. When the royalties is paid, then there is no transfer pricing aggressiveness and vice versa. Thus, the results of this study are appropriate. However, according to research by Shackelford et al. (2007) and Hanlon et al. (2007); Richardson, G., Taylor, G., & Lanis, R., 2013, the value of intangible assets is difficult to determine. Thus, it opens up the opportunity for multinational companies to transfer pricing between the associates to reduce the Group's tax liability. Given the context in Vietnam, the results of this study may be interpreted as the Vietnamese business accounting system has introduced very strict regulations regarding recognition of intangible fixed assets. The condition for recognition as intangible assets in accordance with Vietnamese Accounting Standard No. 04 is that the enterprise must be certain to obtain future economic benefits brought about by the asset and the enterprise must determine the level. It is probable that future economic benefits will be available using appropriate and reasonable assumptions about the economic conditions that exist throughout the useful life of the asset.

Hypothesis 5: "*Multi-nationality is positively associated with transfer pricing aggressiveness in Vietnam* is accepted. The results of this study agree with the results of the studies by Richardson, G., Taylor, G., & Lanis, R. (2013); Hanlon et al. (2007);

Conover & Nichols (2000). Hanlon et al. (2007); Conover & Nichols (2000) that companies with overseas affiliates will have more opportunities to evade taxes and avoid taxes than non-affiliated companies. The results of this study are not consistent with those of Waworuntu, S.R, Hadisaputra, R Pertanika (2016). This is explained by the fact that in Indonesia, the joint venture companies set up offices abroad but barely conducts economic activity so the influence of foreign affiliates to transfer prices is not possible. In Vietnam, branches and businesses associated with Vietnamese enterprises are the parent companies of the company in Vietnam and are operating overseas as business units rather than representative offices in Indonesia.

Hypothesis 6: "Tax haven utilization is positively associated with transfer pricing aggressiveness in Vietnam" is accepted. This finding is not consistent with the results of Richardson & Associates (2013) conducted in Australia; Waworuntu, SR, Hadisaputra, R Pertanika (2016). Both of these studies suggest that the existence of affiliates in tax havens is not available. However, the results of this study support the opinion of experts such as Francis Weygiz studying the tax havens and concerns about the transfer pricing aggressiveness in Vietnam. A report released by Oxfam on May 18, 2017 reveals that \$100 billion is the number that developing countries (including Vietnam) are losing each year due to the tax avoidance activities of multinational corporations. According to Francis Weygiz, 90% of the largest companies in the world are opening branches in at least one global tax haven (Nguyen Duc, 2017).

CONCLUSION

The objective of this study has been achieved when it provides evidence of main factors affecting transfer pricing aggressiveness of enterprises. Among six major determinants of transfer pricing aggressiveness were tested in this study, the size of the company, the number of affiliated overseas companies, tax havens utilization, and financial leverage are all factors positively influencing transfer pricing aggressiveness. However, the results of operations and the value of intangible assets are factors that have the opposite effect on transfer pricing aggressiveness.

The study also provide Vietnamese governance with useful information on the key determinants of transfer pricing aggressiveness, thereby orienting the development of regulatory documents, policies, and regulations in order to control transfer pricing and restrict the transfer pricing manipulation of enterprises. Accordingly, tax authorities of Vietnam should select large scale companies with multiple affiliates located in other countries around the world, especially those with ties to related parties based in tax havens, and companies with high level of leverage to inspect, since then, to improve the efficiency of controlling transfer pricing and enhance transparency of the financial information of enterprises. Other countries, especially developing countries, could learn from these Vietnamese policies to control these determinants of transfer pricing aggressiveness.

There are some limitations for the current study. Firstly, the survey sample size is financial data hand-collected from financial statements for the year 2016. The data does not have a comparison of time-varying variables. Secondly, the research has not yet subdivided the research companies to find out how the characteristics of the industry affect transfer pricing aggressiveness. These limitations provide a number of opportunities for future research on transfer pricing aggressiveness.

REFERENCES

- Al-Eryani, M. F., Alam, P., Akhter, S. H. (1990). Transfer pricing determinants of U.S. multinationals. *Journal of International Business Studies*, 21 (3), 409–425
- Australian Securities and Investment Commission (ASIC), 2010. Consultation Paper 142 Related Party Transactions. Australian Securities and Investment Commission, Canberra, ACT.
- Australian Taxation Office (ATO), 2005. International Transfer Pricing, Introduction to Concepts and Risk Assessment, NAT 2725-04. Australian Taxation Office, Canberra, ACT.
- Benvignati, A. M. (1985). *An empirical investigation of international transfer pricing by U.S. manufacturing firms*. In: Rugman, A. M., Eden, L. (Eds.)
- Bernard, A. B., Jensen, J. B., & Schott, P. K. (2006). *Transfer pricing by US-based multinational firms* (No. w12493). National Bureau of Economic Research.
- Conover, T. L., & Nichols, N. B. (2000). A further examination of income shifting through transfer pricing considering firm size and/or distress. *The International Journal of Accounting*, 35(2), 189–211.
- Desai, M., & Dharmapala, D. (2006). Corporate tax avoidance and high powered incentives. *Journal of Financial Economics*, 79, 145–179.
- Duhigg, C., & Kocieniewski, D. (2012). How Apple sidesteps billions in taxes. *The New York Times*. Retrieved from http://www.nytimes.com/2012/04/29/business/apples-tax-strategy-aims-at-low-tax-states-and-nations.html?_r=0
- Dyreg, S., Hanlon, M., & Maydew, E. (2008). Longrun corporate tax avoidance. *The Accounting Review*, 83(1), 61–82.
- Gravelle, J. (2015). Tax havens: International tax avoidance and evasion. Washington, DC. *CSR Report for Congress*. Retrieved from <https://fas.org/sgp/crs/misc/R40623.pdf>
- Grubert, H. (2003). Intangible income, intercompany transactions, income shifting and the choice of location. *National Tax Journal*, 56(1), 221–242.
- Grubert, H., & Mutti, J. H. (2007). The effect of taxes on royalties and the migration of intangible assets abroad. *National Bureau of Economic Research*.
- Hanlon, M., Mills, L., Slemrod, J., (2007). An empirical examination of corporate tax noncompliance. In: Auerbach, A., Hines, J.R., Slemrod, J. (Eds.), *Taxing Corporate Income in the 21st Century*. Cambridge University Press, Cambridge, pp. 171–210.

- Harris and Associates, Inc. (1988). *Taxpayer Opinion Survey Conducted for the U.S., Internal Revenue Service*. Internal Revenue Service Document 7292. Washington, D.C.
- Hines, J. (1996). Tax policy and the activities of multinational corporations. NBER Working Paper. Retrieved from <http://www.nber.org/papers/w5589>.
- Jacob, J. (1996). Taxes and transfer pricing: Income shifting and the volume of intrafirm transfers. *Journal of Accounting Research*, 301-312.
- Mai Phuong, Nguyen Nga (2018). Dai gia ban le ngoai lo trien mien. Retrieved from <https://thanhmien.vn/tai-chinh-kinh-doanh/dai-gia-ban-le-ngoai-lo-trien-mien-966307.html>
- Mills, L., Erickson, M., & Maydew, E. (1998). Investments in tax planning. *Journal of the American Taxation Association*, 20(1), 1–20
- Mills, L.F., Newberry, K.J., 2004. Do foreign multinationals' tax incentives influence their U.S. income reporting and debt policy? *National Tax Journal* 57 (1), 89–107.
- Newberry, K., & Chaliwal, D. (2001). Crossjurisdictional income shifting by U.S. multinationals: Evidence from international bond offerings. *Journal of Accounting Research*, 39(3), 643–662.
- Nguyen Duc (2017), Thien duong thue va noi lo chuyen gia, Retrieved from <http://baodautu.vn/thien-duong-thue-va-noi-lo-chuyen-gia-d63752.html>
- OECD – CTPA (2006). The OECD's Project on Harmful Tax Practices: 2006 Update on Progress in Member Countries. Paris: Organization for Economic Cooperation and Development.
- PWC (2017), International Transfer Pricing 2015/16, Retrieved from <https://www.pwc.com/gr/en/publications/assets/international-transfer-pricing-guide-2015-2016.pdf>
- Rego, S. O. (2003). Tax avoidance activities of U.S. multinational corporations. *Contemporary Accounting Research*, 20(4), 805–833.
- Richardson, G., Hanlon, D., Nethercott, L., (1998). Thin capitalization: an Anglo-American comparison. *The International Tax Journal*, 24 (2), 36–66.
- Richardson, G., Taylor, G., & Lanis, R. (2013). Determinants of transfer pricing aggressiveness: Empirical evidence from Australian firms. *Journal of Contemporary Accounting & Economics*, 9(2), 136-150.
- Shackelford, D., Slemrod, J., & Sallee, J. (2007). A unifying model of how the tax system and generally accepted principles affect corporate behavior. *Working Paper*, University of North Carolina and University of Michigan.
- Slemrod, J. (2001). A general model of the behaviour response to taxation. *International Tax and Public Finance*, 8(2), 119–128
- Slemrod, J., & Wilson, J. (2009). Tax competition with parasitic tax havens. *Journal of Public Economics*, 93, 1261–1270.
- Vietnamese General Department of Taxation (2016), *Final report on annual tax inspection and examination; tasks and solutions*.
- Womack, B., & Drucker, J. (2011). *Google questioned by SEC over earnings in low-tax countries*. Bloomberg News. Retrieved from <http://www.bloomberg.com/news/2011-03-21/google-questioned-by-sec-over-earnings-in-low-tax-countries-1.html>
- Waworuntu, S. R., & Hadisaputra, R. (2016). Determinants of Transfer Pricing Aggressiveness in Indonesia. *Pertanika Journal of Social Sciences & Humanities*, Volume 24, Special Issue, July 2016, Pages 95 to 110.
- Wilkie, P. (1988). Corporate average effective tax rates and inferences about relative tax preferences. *Journal of the American Taxation Association*, 10(2), 75–88.
- Wilkie, P., & Limberg, S. (1993). Measuring explicit tax (dis)advantage for corporate taxpayers: An alternative to average effective tax rates. *Journal of American Taxation Association*, 15(1), 46–71.

Nguyen Huu Anh,
National Economics University, Vietnam
E-mail address: anhnh@neu.edu.vn

Nguyen Thanh Hieu,
National Economics University, Vietnam
E-mail address: hieuketoan@neu.edu.vn

Doan Thanh Nga,
National Economics University, Vietnam
Email address: doanthanhnga@neu.edu.vn