

# THE IMPACT OF INITIAL PUBLIC OFFERING ON PROFIT BEFORE TAX ON ASSET IN VIETNAMESE ENTERPRISES – FROM THE PERSPECTIVE OF MANAGEMENT ACCOUNTING

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*Over the last few years, Vietnam has witnessed a very strong growth in its Initial Public Offering market. The total capital in the Vietnamese stock market at the highest point (at the end of 2007) was estimated at US\$35 billion, equaling 50% of the GDP. However, among nearly 100,000 joint stock companies in Vietnam (GSO) only 794 ones had their shares listed on stock exchanges (up to May 2011).*

*Management accounting or managerial accounting is concerned with the provisions and use of accounting information to managers within organizations, and provides them with the basis to make informed business decisions that will allow them to be better equipped in their management and control functions (Peter C. Brewer, 2005).*

*The purpose of this study is to try to apply management accounting to investigate how Initial Public Offering impacts on the PBTA (Profit before Tax on Assets) of the Vietnamese enterprises by using SPSS statistic method to answer the question of whether a positive impact between the pre- and post-IPO's PBTA in Vietnamese firms exists and provide some decision support for entrepreneurs in planning a public offering sometime in the future. The objectives of this study are (1) to investigate the significant impact of IPO on enterprise's PBTA in the Vietnamese stock market through profit before tax on asset – an management accounting tool, (2) to give suggestions and apply management accounting analysis to encourage non-listed enterprises to progress into an IPO more effectively.*

Keywords: management accounting , initial public offering (IPO), profit before tax on asset, stock market, Vietnam

## 1. Introduction

This research was based on the following motivations.

**Firstly**, a number of past studies have pointed out that the stock market plays an important role in economic development in every country (Richard, 1997). An economic recession, depression, or financial crisis may eventually lead to a stock market collapse.

**Secondly**, profitability, from management accounting outlook, together with sales revenue, efficiency and employee income, is one of the

most important factors that present corporate operating efficiency. It is the ability of a company to earn profits. Profit before tax on assets (PBTA) is a ratio that measures company earnings before taxes (EBT) against its total assets. The ratio is supposed to be an indicator of how effectively a company is using its assets to generate earnings before contractual obligations must be paid.

**Thirdly**, although management accounting has been successfully implemented in many countries, it is still in the initial stage in Vietnam.

Furthermore, up to May 2011, among the 100,000 joint stock firms in Vietnam, only 794 firms are listed in the stock market. The important question is how and why IPO impacts on the profitability of Vietnamese enterprises. If firms could have better profitability after IPO, why do so few Vietnamese joint stock companies go public?

*Finally*, Vietnamese stock market has only come into being for less than ten years; therefore there are very few empirical researches on Vietnamese stock market from management accounting angle and corollary of insufficient information for investors, which are reasons why this research was conducted.

## 2. Objectives of the study

The primary objective of this study is to find out the impact of IPOs on profitability in the Vietnamese stock market through financial ratios from management accounting viewpoint and to give suggestions and encourage non-listed enterprises to launch an IPO more effectively. This paper will compare the pre- and post- IPOs' profitability especially PBTA by using SPSS and non-parametric Wilcoxon signed-ranked test to examine significant changes in the mean (median) of profitability.

Finally, this research will give suggestions and implications for non-listed enterprises in Vietnam on the way to IPOs.

## 3. Terminology

- Initial public offering (IPO)

An IPO is the first sale of stock by a private company to the public. IPOs are often issued by smaller, younger companies seeking capital to expand, but can also be offered by large privately-owned companies looking to become publicly traded (Black, B., & R. Gilson, 1998).

- Profit before taxes (PBT)

One variable important to calculation of profitability is the profit before taxes (PBT). PBT is a profitability measurement that reflects a company's profits before paying corporate income tax. This measurement is to deduct all

expenses from revenue including interest expenses and operating expenses, but leaving out the payment of tax.

- Profit before taxes on assets (PBTA)

Profit before taxes on assets (PBTA) is a ratio that measures company earnings before taxes (EBT) against its total assets. The ratio is supposed to be an indicator of how effectively a company is using its assets to generate earnings before contractual obligations are paid. It is calculated by dividing company's PBT or EBT by its total assets; PBTA is displayed as a percentage.

$$\text{Profit before Taxes on Assets (PBTA)} = \frac{\text{PROFIT BEFORE TAXES}}{\text{TOTAL ASSETS}}$$

PBTA tells us how efficiently profits are being generated from invested capital (assets) employed. For example, the assets in a company are valued on the basis of their original cost (less any depreciation). A high PTBA does not always mean that we could buy the same assets today and get a high return. Nor does a low return imply that the assets may be employed better elsewhere (Richard et al., 2001).

In a competitive industry, firms can expect to earn only their cost of capital. Therefore, a high PBTA is sometimes cited as a signal that the firm is taking advantage of a monopolistic position to charge excessive prices.

- Management accounting

Management accounting produces information for managers within an organization. It is the process of identifying, measuring, accumulating, analyzing, preparing, interpreting, and communicating information that helps managers fulfill organization objectives (Horngren, Sundem, & Stratton, 2005, p. 5). Accountants prepare budgets to achieve goals in financial terms by identifying, measuring, accumulating, analyzing, interpreting, and communicating information (Horngren, Sundem, & Stratton, 2005, p. 5).

## 4. Hypothesis, methodology and data collection

*a. Research hypothesis:*

In 2006, Lubos and Taylor studied firm profitability after IPO. This study focused on the average profitability of private firms. This study predicted that firm profitability should decline after the IPO. This study used the sample of 7,183 IPOs in the US between 1975 and 2004. Many IPO models assumed that the entrepreneur has private information about her own firm (Chemmanur and Fulghieri, 1999). Asymmetric information may well explain some of the observed post-IPO declines in profitability, but it is not clear how it would generate higher declines for firms with more volatile profits and firms with less uncertain average profits.

Another possible explanation for the profitability pattern is earnings management. Teoh, Welch and Wong (1998) argued that firms opportunistically inflate their earnings through discretionary accruals shortly before going public. However, firms that are willing to manipulate their earnings around the IPO are likely to manipulate them after the IPO as well. Such firms are likely to smooth their post-IPO earnings, given the apparent market preference for less volatile earnings.

In 2006, there was a boom in the Vietnamese stock market and many companies became famous after their IPO; but what about their PBTA? Can they earn more PTBA after their IPO and is there a positive impact on companies and their PTBA in Vietnam?

Based on the objectives and the questions of the study, the following hypothesis is offered for the study:

*Ho: There is no significant difference between the pre- and post- IPO' firm PTBA in Vietnam.*

*H1: There is a significant difference between the pre- and post- IPO' firm PTBA in Vietnam*

## **b. Methodology:**

To test the above-mentioned hypothesis, this research performs comparisons of pre- and post-IPO profitability performance measure. The data are obtained from a three-year period (from one year before, the year of the IPO, and one year after) in the Vietnam stock market. The study computes the mean of PBT, total assets, and

PBTA in each firm covering a three-year period, from one year prior to IPO (year-1), the year of IPO (year 0), and one year after IPO (year +1). The next step is to conduct non-parametric test and Wilcoxon method to make the comparison to answer the research question. This method is also carried out by many previous studies such as Nellis and Kikeri (2004), Truong et al. (2004), and Toan N. (2007).

## **c. Sampling design:**

At present, there are two Securities Trading Centers in Vietnam (Hà Nội and HCMC) with a total number of listed companies of 794 (up to May 2011), and 189 of which were listed in 2010 and only 41 listed before 2006. To support this study, a sample of 52 companies from HCMC Securities Trading Center and five companies from Hà Nội Securities Trading Center is used. These companies are selected for the sample according to their size and field so that it can represent the whole population.

## **d. Data collection:**

Before gathering the data for this empirical study, first, it is necessary to determine which kind of data or information would be useful and helpful. This study collects data by choosing Vietnamese enterprises that have carried out IPOs and been listed on the Vietnamese stock exchanges by the end of December 2009 so that these firms have had financial and accounting data for at least one year before and after their IPO.

Information about pre-IPO data is collected from the provincial State-Owned Enterprise Reform Board (each province has its own SOE Reform Board), the General Department of Taxation, the General Statistic Office and the Corporate Finance Division as well as some large banks in Vietnam, because these enterprises have to submit their audited financial information and accounting statements to these organizations. Data collected are about profits before tax and total asset for at least one year prior to IPO, which are almost all presented in a company's offering prospectus and other primary documents.

Moreover, from the list of IPO enterprises on the Vietnamese's stock exchanges, it is possible to get pre-IPO financial data by downloading information from company-owned websites and from the news reporting websites as well as

## 5. Results and discussion

After collecting the data from 57 listed companies, we use SPSS to run the data and the results are presented in Table 1

**Table 1: Descriptive statistics of profit before taxes (VND million)**

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25%	50 % (Median)	75%
PBT of year -2	57	12,089	15,436	308	76,926	2,880	6,521	16,118
PBT of year -1	57	14,930	17,738	311	88,785	3,376	8,688	19,014
PBT of year 0	57	18,754	22,930	344	112,030	4,896	9,256	22,642
PBT of year 1	57	37,323	77,774	264	544,080	7,235	14,673	31,828
PBT of year 2	57	42,358	80,462	724	547,729	8,373	18,256	41,005
PBT of year -2 to year 2	Number of companies with increased PBT					55		
	As %					96%		
PBT of year -1 to year 1	Number of companies with increased PBT					54		
	As %					95%		

Note: 1USD = 21,000VND

other sources on the Internet. By government regulations, these companies have to disclose all financial and accounting information to investors publicly. It is economical and timesaving by doing so over the Internet.

The post-IPO financial and accounting data are rather easy to collect for the reason that they are all published on the Vietnamese stock exchange every quarter of the fiscal year. Alternatively, the data can be obtained from company-owned websites, large banks' websites, and other secondary data sources. The data and relevant information are also available to obtain easily. The companies have to, by regulatory law, disclose all their financial and accounting information in annual reports to investors and publicize their annual reports.

Table 1 shows that PBT of some companies has increased in the period from two years before IPO to two years after IPO. In the surveyed 5-year period, profits before taxes of 55 out of 57 companies (96%) have increased. In the surveyed 3-year period, 54 companies (95% of surveyed companies) enjoyed increased PBT. In conclusion, most companies in both periods have profitably done their businesses and increased their profits before taxes by reasonable operations, and good managerial and organizational methods.

Table 1 is a detailed description of companies' PBT through years before and after IPO. PBT of two years before IPO, PBT of one year before IPO, PBT of the year of IPO, PBT of one year after IPO, and two years after IPO were marked as PBT of year -2, PBT of year -1, PBT of year 0, PBT of year 1, and PBT of year 2. The number of observations is 57.

From Table 1, it is clear that the mean of PBT increased remarkably from VND12 to 42

billion before and after IPO. Table 1 also shows 75% of companies had an increase in PBT after IPO. For instance, in the period from the second year before IPO to the second year after IPO, PBT increased from VND16 to over 41 billion.

through the observance of all companies. For instance, 75% of the companies in the first year after IPO had a value of PBT of over VND31 billion while its mean value was more than 37 billion.

**Table 2: Descriptive statistics of total asset (VND million)**

	N	Mean	Standard Deviation	Minimum	Maximum	Percentiles		
						25 %	50 % (Median)	75%
Asset of year -2	57	327,944	1,045,232	4,562	7,547,006	33,900	76,192	209,176
Asset of year -1	57	362,946	1,151,264	6,056	8,301,707	41,513	82,867	239,711
Asset of year 0	57	430,267	1,442,938	13,345	10,604,802	44,853	107,080	242,419
Asset of year 1	57	505,706	1,566,853	12,211	11,562,321	59,343	155,037	316,033
Asset of year 2	57	606,106	1,761,043	21,571	12,569,456	68,232	165,000	340,583
Asset of year -2 to year 2	Number of companies with increased assets					56		
	As %					98%		
Asset of year -1 to year 1	Number of companies with increased assets					53		
	As %					93%		

Note US\$ 1 = VND 21,000

Similarly, 50% of the 57 surveyed companies increased their PBT, and especially, 25% of them enjoyed a threefold increase in their profit, from VND2.88 to 8.37 billion (two years before and after IPO).

In the largest companies, the value of PBT increased dramatically by more than seven times, from VND76.9 to over 547.2 billion over two years before and after IPO. The same trend was demonstrated in the smallest companies where the PBT increased from VND0.3 to 7.2 billion over the 5-year period before and after IPO. Furthermore, it is easy to understand the fact that in one year after IPO, the minimum PBT slightly reduced but the mean of PBT dramatically increased compared with that in one year before IPO (from 14.93 in one year before IPO to 37.32 in one year after IPO). In the smallest companies, their PBT was small in comparison with that of other companies.

Finally, there is no difference between companies' earned PBT and its mean values

Table 2 shows that most companies increased their total assets in the period from two years before IPO to two years after IPO. There are 56 out of 57 companies (98% of the surveyed ones) that had their total assets increased. There is only one company that failed to do so because it is a construction company (Construction and Infrastructure Development Joint Stock Corporation), and had used its assets to repay its debts. In the short period, the figures are 53 enterprises and 93% respectively. It proves that the companies have adopted right measures to attract more investment in the assets after IPO. It is worth noting that total assets of the 25<sup>th</sup> company has significantly increased after IPO, from some VND41 billion (in the year -1) to more than VND59 billion (the year 1). Similarly, the 50<sup>th</sup> and 57<sup>th</sup> companies have increased their total assets in the period of one year before and after IPO. Some 75% of companies have a total asset of over VND209 billion in the year -2 and it



increased dramatically to VND340 billion in the year 2. Total assets of smallest companies (minimum) also rose from VND6 to over 12 billion in the period from one year before IPO (year -1) to one year after IPO (year 1). Similarly, in the largest companies, the value of asset also considerably climbed up from 7,547 to 12,569 during the period from the year -2 to the year 2.

Finally, in the year before IPO, although total assets of 75% of the companies amounted to over VND209 billion, its average was only VND327 billion. This result could imply that there was some high value of total assets in some companies (the maximum is VND7,547 billion).

0.00142 (at 0.01 levels). Thus, as indicated earlier, the values of PBTA showed good improvements in firms after IPO.

The result from Table 3 reveals that there is a significant increase in the mean of profitability before IPO and after IPO with the p value (2-tailed) of 0.000. We accept the hypothesis H1: There is a significant difference between the pre- and post- IPO' firm profitability in Vietnam.

## 6. Recommendation and limitation

Given the exploratory nature of this study, several limitations of the research were

**Table 3: Results on PBTA in IPO companies**

Sample	Variables	N	Mean (median) before	Mean (median) after	Mean (median) difference	Z-statistics for difference in performance (after - before)	p-value	Percentage of firms that changed
Long period Sample (-2 to +2)	PBTA	57	0.1009	0.1240	0.0231	-2.96754	0.00300**	81.63%
			0.0668	0.1009	0.0341			
Short period Sample (-1 to +1)	PBTA	57	0.1078	0.1263	0.0231	-3.19000	0.00142**	77.55%
			0.0768	0.0922	0.0341			

Note: \*\* Significant at the 0.01 level

US\$ 1 = VND 18,000

(-2 to +2) means two years before and after IPO

Table 3 shows that the PBTA has reasonably increased for all sample companies in both long and short phases. Specifically, in the long period, the mean value of PBTA (median) increased from 10.09 (6.68) to 12.40 (10.09) percent after IPO. In the meantime, these values are 10.78 (7.68) and 12.63 (9.22) percent in the short period. Increases of PBTA mean (median) values in both periods are found to be statistically significant with Z-statistics for difference in performance (after - before) equaling -2.96754 and -3.19000 respectively and p-values equaling 0.003 and

presented.

The first weakness of the study concerns with the data insufficiency in HCMC Stock Market (HoSTC) and Hanoi Stock Market (HaSTC). Among 57 surveyed listed companies, 52 of them have been listed on HoSTC and only five have been listed on HaSTC. An explanation for this number is that HaSTC was established in 2005 and only a few companies have enough data for the research while HoSTC, on the contrary, has more than ten years of experience and over 416 listed companies and most of the biggest

companies were listed there, so there are abundant data for collection. Further studies may not have this problem.

**Secondly**, this study measured the effect of IPO on firm profitability by using PBTA as the most common factor. However, there are several other factors that can be used for measuring the profitability such as profit before tax on equity, return on capital employed, and return on investment, etc. Further studies should deeply analyze all financial indicators such as profitability, efficiency, investment, output, employment, dividend payout, and board turnover and so on.

Then, due to the focusing sample used in this research is only listed companies, the study suggests that further study can pay more attention to comparing the financial and firm performance of listed and non-listed companies in the same industry to provide further evidence on the impact of IPO on firm's profitability in Vietnam.

Last but not least, the control of financial system has not been tight enough in Vietnam until recently. Some companies still try to polish their financial report in order to satisfy their shareholders. As a result, the collected data reflects unreal financial condition. It is a difficulty not only for this research but also for further studies.

Throughout the data analysis, from management accounting point of view it is obvious that IPOs have a positive impact on firms' PBTA in Vietnam, however until now there is only a small number of listed companies (accounting for only 1% of the joint stock companies in Vietnam). Vietnamese government should adopt more policies to encourage enterprises to go public. Some policy recommendations are as follows:

**Firstly**, in the past Vietnamese government subsidized its economy. Though state-owned enterprises equalization process has been performed for many years, many of them still operate inefficiently. The government should take strong measures to equalize inefficient state-

owned enterprises and then encourage such enterprises to launch IPOs.

In addition, the government should loosen compulsory conditions to enterprises that want to go to IPO like capital and document term consideration, etc., so that IPO process becomes more favorable and more and more companies are listed in Vietnam stock market.

On the side of Vietnamese companies, it is predicted that the Vietnamese economy will continue to post a high growth rate in 2011 (Hang, Minh, 2011) while many countries are still in economic crisis stage of rear episodes worldwide. Investment by foreign investment firms and privately-owned domestic firms will thrive. In this context, every company needs to show good performance in order to attract more capital. Vietnamese enterprises should apply managerial accounting tool such as information for decision-making, planning, directing, controlling an organization's operations, and appraising its competitive position. Vietnamese firms should also recognize how to reduce cost and create more revenue so that profit can be improved. The positive results from IPO process will become a good motivation for Vietnamese companies to promote their own decision to offer IPOs in Vietnam ■

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