IMPACT OF DEBT ON PROFITABILITY OF HOTEL COMPANIES LISTED IN STOCK EXCHANGE OF THAILAND



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ABSTRACT

The study aims to examine the situation regarding profitability and debt financing as well as to investigate the impact of debt on profitability of nine hotel companies listed in the Stock Exchange of Thailand during 2001 –2020 by employing descriptive statistic including mean values and trend lines and multiple linear regression analysis with dummy variables. In this study, total debt, short-term debt and long-term debt are measured by total liabilities to total assets ratio, current liabilities to total assets ratio, and non-current liabilities to total assets ratio, respectively while net profit margin represents profitability .Moreover, cost of debt, liquidity, efficiency, sale growth, and company size are assigned as controlling variables.

The findings reveal that profitability of all hotel companies was volatile during the study period and Shangri-La Hotel had the greatest profitability with the average net profit margin of 12.34 percent. Furthermore, all of them had debt financing which was obtained from both short-term and long-term debt. The results from the multiple regression analysis reveal that total debt, short-term debt and long-term debt had the significantly negative impact on profitability of hotel companies but short-term debt had the greater impact on profitability than long-term debt. Furthermore, efficiency as measured by total asset turnover was found to have the positive impact on profitability. *Keywords: Debt Financing, Profitability, Hotel Companies, Stock Exchange of Thailand*



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CHAPTER 1

INTRODUCTION

1.1 Background and Signification of the Problem

Profitability is a simple but important key measure of business success. Each company needs to ensure that its profitability stays positive otherwise, it may not be able to sustain in the long run. Profitability is also important to a company's stakeholders since it is a reference for them to review and make decisions regarding the company. For example, investors would review the company's profitability before they decide to invest while suppliers review it to ensure that the company has ability to pay their bills. Hence, it is important for management to ensure that the company's profitability is constantly growing. However, growing revenue alone may not be sufficient to drive the profitability. There are also more factors to be focused lean operation cost, sufficient investment fund, and reasonable expenses. While an income statement is the first reference to evaluate profitability, a balance sheet is also important. Besides viewing a company's assets, liability is also an important factor. Liabilities or debt are one of the most vital performance indicators of companies since they affect companies' expenses, operations and, of course, profitability. Therefore, proper debt management is considered very crucial for companies' good performance and sustainability.

One of the most important management's functions is to ensure that the company has sufficient funds for its operation and investment. To raise funds for the company, it may not be sufficient to only rely on the company's owners or investors. As a result, debt financing is another option for management when seeking sources of

funds. Debt financing may be an easier and faster option for some company while it contains higher cost and affects the company's income statement as well as balance sheet. Income statement is impacted from interest expense which will dilute the company's profit although there might be some tax benefit to offset such expense. Balance sheet is impacted from higher liabilities and may cause lower equity portions. Relationship between debt and company's profitability has been widely studied by many researchers. They found both positive and negative impacts. For example, Addar, Nyarko-Baasi & Hughes (2013) found a positive relationship between short-term debt and profitability and negative relationship between long-term debt and profitability of listed firms in Ghana. Ikapel & Kajirwa (2017) also found a negative relationship between long-term debt and financial performance of state owned sugar firms in Kenya whilst Jones & Edwin (2019) found a positive relationship between total debt, shortterm debt, and long-term debt and performance of listed consumer goods firms in Nigeria. Therefore, the impact from debt is still unclear whilst it is important and interesting for further study.

Since Covid-19 pandemic occurred in early 2020, traveling has been paused for both leisure and business purposes. Hotel industry has been detrimentally impacted. With significant loss in revenue, their cash flow has struggled. However, large hotel companies are still keep investing on their mid-range and budget hotels such as The Erawan Group Plc. and Central Plaza Hotel Plc. (Lunkam, 2021). Due to both crisis and investment plans, hotel companies need to find sources of funds and most of them are from debt financing. Data from the Stock Exchange of Thailand in 2021 proves that most hotel companies had significantly greater debt in 2020 (see Figure 1), and the greater debt in 2021 is also anticipated. This situation causes concern that hotel companies will have debt problem in the long run. Because of huge assets mostly financed by debt of most hotel companies, the hotel industry is selected for this study. That is, this study aims to investigate the impact of debt on profitability of hotel companies listed in the Stock Exchange of Thailand. This will provide a better understanding of the impact of debt on profitability in order to improve debt management and financial performance as well as assisting managements on their decision making.

Figure 1.1: Total Liability of Nine Listed Hotel Companies in the Stock Exchange of



Thailand

Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani, ERW = The Erawan Group, GRAND = Grande Asset Hotels And Property, LRH = Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel

(The Stock Exchange of Thailand, 2021)

1.2 Research Objectives

Research objectives are as the following.

1.2.1 To examine the situation regarding profitability of hotel companies listed in the Stock Exchange of Thailand

1.2.2 To examine the situation regarding debt financing of hotel companies listed in the Stock Exchange of Thailand

1.2.3 To investigate the impact of debt on profitability of hotel companies listed in the Stock Exchange of Thailand

1.3 Scope of the Study

The scope of this study is as the following.

1.3.1 This study covers only nine hotel companies listed in the Stock Exchange of Thailand.

1.3.2 This study covers the period 2001 - 2020, totally 20 years.

1.4 Expected Benefits

Expected benefits from the result of this study are for main users as the following.

1.4.1 Investors – for evaluate risk and making decision in hotel companies stocks

1.4.2 Management – for better debt management and minimize negative impact of debts to the company's performance as well as ensuring statement of financial position and statement of comprehensive income are in the right position and attractive for the investors

1.4.3 Policy makers such as the Stock Exchange of Thailand and the Securities and Exchange Commission – for setting up, implementing, and monitoring debt management policy for listed companies in order to strengthen the stock market and uplift the standards

1.5 Technical Terms

According to Investopedia (2021), technical terms of this study are defined as the following.

1.5.1. Profitability is a measurement on a company's ability to yield profit from investment. It is measured in the relative factors instead of amount and used to evaluate the company's performance.

1.5.2. Net profit is a final profit value which is derived from revenue minus cost of goods sold, operating expenses, and other expenses (included interest expenses and taxes). It is stated in an income statement of the company which can be both positive and negative values depending on the company's performance.

1.5.3. Net profit margin is a relationship between net profit and revenue. It is usually presented in percentage value which interprets the return on profit of one dollar in revenue. Growth in net profit margin is preferable.

1.5.4. Leverage is one of the financial tools that uses borrowed funds to expand assets. This occurs when a company wants to expand and has higher return without using funds from equity but chooses to loan instead.

1.5.5. Debt Financing is a financial activity that increases a company's working capital by lending money from individual or institutions investors. The company needs to return in both principal and interest to the investors within the agreed

period and conditions. The interest can be recorded as expenses to the company which contribute to tax saving.

1.5.6. Current assets are assets that can be quickly converted, transferred, transformed, and used in normal operation within a year such as cash, account receivable, and stock inventory.

1.5.7. Non-current assets are long-term assets that can be used for longer than one year and take time to convert into cash when needed.

1.5.8. Total assets are economic valued resources that are used to generate a company's value. Total assets are combined from both current and non-current assets which equal to sum of total liabilities and equity in a balance sheet.

1.5.9. Current liabilities are short-term financial obligations that need to be repaid within a year which regularly occur from operating activities.

1.5.10. Non-current liabilities are long-term financial obligations that need to be repaid over a year which regularly occur from investment activities.

1.5.11. Total liabilities are the total financial obligation that a company has to repay which combine both current and non-current liability.

1.5.12. Debt ratio is derived from liability divided by total asset which is used to compare portions of debt over assets. Higher ratio implies higher risk of the company since it contains higher debt than owned assets.

1.5.13. Cost of debt is an average interest rate on total debt. It is derived from the total interest amount divided by the total debt amount and is used to identify the total interest cost of borrowed funds. 1.5.14. Debt management is a strategy to manage debt of the company and ensure the debt ratio is in the right portion as well as interest cost is reasonable in order to maximize profit from the loan.



CHAPTER 2

LITERATURE REVIEW

There are four main sections which have been reviewed and referred to support the study on the impact of debt on profitability of hotel companies listed in the Stock Exchange of Thailand as following.

2.1 Debt Financing

Debt financing is a financial activity to raise a company's working capital by lending from outsiders. Borrowing period and interest rate are agreed between both parties. Unlike raising fund from equity financing, the company does not lose any control from giving away on stock in exchange (Investopedia, 2021). Although there are interest expenses, debt financing is popular with several theories to support debt financing such as following.

2.1.1 Debt Covenant Hypothesis is one of the three hypotheses from Positive Accounting Theory. This hypothesis is an assumption that a company's management change accounting procedure to favor their current period earnings reports by shifting the earnings from future period when it is closer to debt agreement in order to avoid penalty fee as per the debt agreement (Nasurion, Putri, Muda & Ginting, 2018)

2.1.2 Modigliani - Miller (MM) Theorem focuses on company's capital structure. The first version was developed base on perfectly efficient market which conclude that the company's capital structure has no impact to its value (Corporate Finance Institute, 2021). The theorem was further to include taxes, bankruptcy cost, and asymmetric information factors and found positive benefit from tax shield (Corporate

Finance Institute, 2021). Tax shield is a benefit from tax saving on interest taxable expenses. Tax shield creates value to the leverage company and compensate negative perception of investors on the company's additional loan.

2.1.3 Trade - Off Theory is further developed from MM theorem which focus more on effect of tax and bankruptcy cost from a company's capital structure setup (Cekrezi, 2013). While the tax-shield benefit is enjoyable to the company, too much debt could create high chance of bankruptcy. Since there are both advantage and disadvantage on debt financing, the company has to find an optimal capital structure in order to maximize tax-shield benefit while minimize risk of bankruptcy.

2.1.4 Pecking Order Theory is based on asymmetric information that internal management has more information than externals (Corporate Finance Institute, 2021). This imbalance of available information cause internal financing contains lower cost than externals. External financing can be categorized base on balance sheet which are liability or creditors and equity or shareholders. Loan from creditors has lower cost than raising fund from shareholders since the creditors has lower risk than shareholders due to higher prioritize of return in case the company become bankruptcy. In addition, raising equity contains hidden cost from diluting stock price and negative signal on the company's performance. Considering on cost impact, source of fund with lowest cost should be the first priority which imply that the company should fund from internal (retained earnings) first then borrowing from creditors as the second and raising fund from shareholder is the last option.

2.2 Financial Statement Analysis

Financial statement is a record of a company's valued business transactions under three main parts that are balance sheet, income statement, and cash-flow statement (Investopedia, 2021). Detail of the main parts of financial statement are as following.

Balance sheet contains data on the company's assets, liabilities, and equities which reports on financial value of the company's belonging and obligations as of reported date.

Income statement reports the company's performance on specific accounting period by deriving net profit from revenue less cost and expenses. Company's operational performance as well as efficiency of its management are reviewed through the income statement.

Cash-flow statement includes both cash in-flow and out-flow of a company which does not limit to operational activities but include investment and financing activities. With the movement in activities, cash-flow statement represent the company's cash status as of reported date.

Since the financial statement reports all necessary aspects of the company, all stakeholders which include management, creditors, and investors use data from the financial statement to analyze the company's performance and evaluate risk in their expectation on investment. There are many techniques of the financial statement analysis such as following.

2.2.1 Trend Analysis or horizontal analysis is a technique that compares the same item in the financial statement over a period of time (Javed, 2021). Main objective of this analysis is to evaluate the growth of compared items over a time period in order

to review current company's performance as well as predicting future trends. This technique is easily computed in amount and percentage by using data from an income statement and balance sheet. Calculations are as following.

Amount = Latest data – Earlier data

Percentage = ((Latest data – Earlier data) / Earlier Data) x 100

Table 2.1 : Sample of Comparative Financial Statement Data with Trend Analysis

Financial Data	Financial Data 2019 2020		Variance (2020-2019)		
			Amount	%	
Total Assets	17,000,000	21,000,000	4,000,000	23.5%	
Total Liabilities	12,000,000	17,200,000	5,200,000	43.3%	
Total Equity	5,000,000	3,800,000	(1,200,000)	-24.0%	
Revenue	6,500,000	2,300,000	(4,200,000)	-64.6%	
Net Profit	450,000	(1,700,000)	(2,150,000)	-477.8%	

Based on the sample financial statement data in table 2.1, we can compute trend analysis as in column "Variance (2020-2019)". Sample explanation from the trend analysis is total asset in 2020 increase from 2019 by 4,000 or 23.5%. This seems to be a good performance since their total assets significantly increase over year and can lead to higher trust from investors. However, when considered further at total liabilities, the increasing of the total assets is from higher liabilities or debt and imply on high risk for the investors. Although this technique is simple to explain on individual items, it should be crossed analysis between the items in order to avoid under evaluate the company's performance. **2.2.2** Common Size Analysis or vertical analysis is a technique that compare an individual item to selected based items in financial statement within the same period of time and presented in percentage value (Javed, 2021). Main objective is to analyze the proportion of selected items over the base item as well as capital structure of the company. It is commonly used to evaluate both income statement and balance sheet. In addition, it is also provide useful information when analysis performance of multi company or businesses unit since it can explain a contribution of individual company or item over the same based. Calculation in this technique is as following.

Proportion Percentage = (Amount of indiscipline item/Amount of base item) x 100

Detail	<u>2020</u>		<u>2019</u>	
	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>
Sale	20,000,000	100.0%	15,000,000	75.0%
Cost of Good Sold	5,000,000	25.0%	3,000,000	20.0%
Gross Profit	15,000,000	75.0%	12,000,000	80.0%
Sale & Marketing Expenses	2,000,000	10.0%	1,500,000	10.0%
Administrative Expenses	1,500,000	7.5%	1,000,000	6.7%
Total Operating Expenses	3,500,000	17.5%	2,500,000	16.7%
Income Before Interest	11,500,000	57.5%	9,500,000	63.3%
Interest	1,000,000	5.0%	1,000,000	6.7%
Income Before Tax	10,500,000	52.5%	8,500,000	56.7%
Tax	3,150,000	15.8%	2,550,000	17.0%
Net Profit	7,350,000	36.8%	5,950,000	39.7%

Table 2.2 : Sample of Comparative Income Statement with Common Size Analysis

From sample in table 2.2, common size analysis is presented in column "%" and "Sale" is set as based item. Sample explanation from the common size analysis is Company A has net profit margin in 2020 as 36.8%. Further analysis on the income statement, cost of goods sold is 25% of sale value while total operating expenses is 17.5% and follow by tax expenses of 15.8%. If the company want to increase their profit margin, they should focus on their cost of goods sold first since it is the highest impact. Furthermore, comparison of common size analysis over period is also useful. From the sample in table 2.2, comparing to 2019, company A has lower net profit margin although revenue is higher. The main impact is from cost of goods sold which grew the margin from 20% in 2019 to 25% in 2020. This can lead to further investigate that supplier increase the materials price or company A reduce the selling price to gain on sale volume while cost of materials remain the same.

2.2.3 Financial Ratio Analysis is a technique that compare data item from financial statement and reported as relationship of the compared data in the same period (Investopedia, 2021). It is used to evaluate the company's performance individually as well as comparing with other in the same industry. This analysis can be categorized as following.

1. Liquidity Ratios measures a company's ability to pay back debt by using an internal fund (Investopedia, 2021). Main objective is to analyze quickness that the company can convert their asset to pay coming due liability. The higher ratio, the better liquidity position for the company. Common liquidity ratios are as following.

1.1 Current Ratio is an ability that a company uses its current asset to pay back its short-term liability or current liability which is due within a year. Calculation formula is as below:

Current Ratio =
$$\frac{\text{Current Asset}}{\text{Current Liabily}}$$
 (times)

1.2 Quick Ratio is similar to current ratio but exclude inventory value since it may take time to convert the inventory into cash. Calculation formula is as below:

Quick Ratio =
$$\frac{\text{Current Asset-Inventory}}{\text{Current Liabily}}$$
 (times)

 Efficiency Ratios measures a company's ability to utilize its resources effectively as well as maximizing its profitability (Corporate Finance Institute, 2021).
 More efficiency reflect to more profitability and return to investors and shareholders.

Sample of efficiency ratios are following.

2.1 Total Asset Turnover describe an effectiveness on revenue return over total asset value. Higher ratio mean a company efficiently utilize its asset to generate. Calculation formula is as below:

Total Asset Turnover = $\frac{\text{Total Revenue}}{\text{Average Total Asset}}$ (times)

Where:

Average Total Asset = $\frac{\text{Beginning total asset value} + \text{Ending total asset value}}{2}$

2.2 Account Receivable Turnover describe an effectiveness on collecting money from credit sale. Higher ratio mean more efficient on collection and reflect positively to a company's performance. Calculation formula is as below:

Account Receivable Turnover =
$$\frac{\text{Net Credit Sales}}{\text{Average Account Receivable}}$$
 (times)

Where:

Net Credit Sales = Total revenue from credit sales – Returns from customers

Average Account Receivable =

Beginning account receivable value + Ending account receivable value

2.3 Inventory Turnover describe an effectiveness on inventory managing. Higher ratio means a company efficiently manages their inventory that converts quickly to be sold. Calculation formula is as below:

Inventory Turnover = $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} \times 100 \text{ (times)}$

Where:

Average Inventory =
$$\frac{\text{Beginning inventory value} + \text{Ending inventory value}}{2}$$

3. Leverage Ratio measures level of debt of a company against selected data from financial statement (Corporate Finance Institute, 2021). Main objective is to review debt portion under company's capital structure while evaluate benefit gain from debt. Common leverage ratio are as following.

3.1 Debt to Asset Ratio describe portion of debt over a company's asset value. Higher ratio means most of the company's asset are funded from debt. Calculation formula is as below:

Debt to Asset =
$$\frac{\text{Liabiliy}}{\text{Total Asset}} \times 100 \ (\%)$$

Where:

Liability could be evaluate by total, short-term, and long-term liability

3.2 Debt to Equity Ratio describe portion of debt over a company's equity value which mainly focus on total and long-term debt. Higher ratio means higher risk to the company due to high debt. It could lead to difficulty of additional loan in the future and interfered management because of some debt conditions. Calculation formula is as below:

Debt to Equity =
$$\frac{\text{Total Liability}}{\text{Total Equity}}$$
 (times)

4. Profitability Ratio measures the efficiency of a company on generating profit over the company's revenue and return value on assets and equities (Investopedia, 2021). Besides evaluating individual performance of the company, the profitability ratios are used to compare with other companies' performance in order to compare benchmark and competitiveness. Samples of profitability ratios are as following.

4.1 Net Profit Margin is a comparison of net profit value to revenue. It evaluates how much net profit a company earns from their revenue generated which also reflect cost and expenses management. It usually to be presented in percentage. Calculation formula is as below:

Net Profit Margin = $\frac{\text{Net Profit}}{\text{Revenue}} \times 100 \ (\%)$

4.2 Return on Asset is a comparison on net profit over total assets value. It usually used to compare net income after tax in order to evaluate the efficiency of a company on using its assets. Higher ratio implies better performance. Calculation formula is as below:

Return on Asset = $\frac{\text{Net Profit}}{\text{Total Asset}} \times 100 \ (\%)$

4.3 Return on Equity is a comparison on net profit over total equity value. It commonly used to evaluate the efficiency of a company on using shareholders' equity. Each industry has its benchmark for the good ratio. Calculation formula is as below:

Return on Equity =
$$\frac{\text{Net Profit}}{\text{Total Equity}} \times 100 (\%)$$

2.3 Related Research

There are several studies on relationship between debt and company's profitability as following.

Addae, Nyarko-Baasi & Hughes (2013) studied the relationship between capital structure and profitability of 170 financial statements of 34 listed companies in Ghana during 2005-2009. Using regression analysis, there is a positive relationship between short-term debt and profitability while long-term debt and profitability are negatively related for overall listed companies. However, there are some different relationship at industry sector level. Short-term debt has positive relationship only to profitability of banking & finance, distribution, food & beverage, and pharmaceuticals industries while the rest has insignificant impacts. Long-term debt has negative relationship only to profitability of profitability of manufacturing industry while the rest has insignificant impacts. Total debt has negative relationship to profitability of food & beverage and mining industries and positive relationship to profitability of and pharmaceutical industry while the rest has insignificant impacts. With the result, the trade-off theory was suggested for Ghanaian listed firms.

Kebewar (2014) studied on the effect of debt on non listed companies' profitability in French. They investigated data from 2,240 service sector companies with positive equity during 1999-2006 by using generalized method of moments (GMM). They concluded that debt has no impact the companies' profitability which is same as firm size factor.

Raisa & Cristian (2015) studied on impact of debt on corporate profitability which using data from 50 companies in Bucharest Stock Exchange during 2003-2014. In this study, return on asset ratio is presented as the companies' profitability while considering short-term and long-term debt to total liabilities ratio as debt. Company size, growth opportunities, tangible assets to total asset ratio, and liquidity ratio are included as control variable in the test model. Researchers select fixed effect model based on applying Hausman-Test and Wald test. They found that both short-term and long-term debt negatively affect the companies' profitability and used agency cost theory to describe the result.

Habib, Khan, & Wazir (2016) studied the impact of debt on profitability of 340 non-financial sectors firms in Pakistan during 2003-2012. Return on asset, return on equity, earnings per share, and gross profit margin are used to represented the firms' profitability while short-term debt to total assets, long-term debt to total assets, and total debt to total assets stand for debt. In addition, firm size, sale growth, asset growth, and tax are included as control variable in the model. By using regression analysis, they found return on assets are negatively impacted by short-term debt, long-term debt, and total debt. Pecking order theory is referred and suggest the companies to use their internal fund as the first priority.

Muscettola & Naccarato (2016) studied the relationship between debt and profitability of Italian SME companies by using data from 7,370 companies in commercial sectors during 2006-2010. They founded negative relationship between debt and company profitability from using simple moving average. They also split the data into 10 provincial classes which are categorized by bank credit per GDP. Regression analysis result based on provincial classes, they found strong relationship between debt and company profitability in the area with higher supply of bank credit while result for area with lower supply of bank credit are weaker. Ikapel & Kajirwa (2017) studied a relationship between long-term debt and financial performance of state owned sugar firms in Kenya. The study uses data from four state owned sugar firms during 2004-2014. The result was fail in statistically significant but significantly on linear regression analysis that there is a negative relationship between debt and the firms' profitability.

Azia & Abbas (2019) studied on effect of debt to non-financial sector firms in Pakistan by using regression analysis to run sample data of 360 companies in 14 sectors of non-financial sector in Pakistan Stock Exchange during 2006-2014. Negative impact from debt financing is found on the companies performance. They recommended the companies to use internal source of funds in order to avoid negative impacts. In this study, firm size is included and it results positive impact to the companies' performance since the size factor could provide benefit on economies of scale.

Darapho & Tongkong (2019) studied on impact of capital structure on listed companies' profitability in energy and utilities on the Stock Exchange of Thailand. They used 198 samples from 42 companies during 2014-2018. In this study, debts was represented by total debt to total asset and long-term debt to total asset while profitability was from return on asset and return on equity. From regression analysis, debts has negative impact to the companies' profitability which is measured by return on asset while there is no impact on return on equity. Hence, they suggest to follow Pecking Order theory which utilizing internal fund as the first priority due to cost concern.

Jones & Edwin (2019) studied on the relationship between debt and corporate performance of 15 consumer goods companies in the Nigerian Stock Exchange during 2006-2017). The result from regression analysis shows that total debt to asset ratio, short-term debt to asset ratio, and long-term debt to asset ratio has a positive relationship with return on asset which imply debt has positively impact to the companies' performance.

Mamaro & Legotlo (2020) studied the impact of debt on performance of 26 retail firms listed on the Johannesburg Stock Exchange. Fixed effect model is used in the regression analysis. The study found that size and long-term debt to asset negatively affect the firms' performance whilst the lagged return on equity, total debt to asset, and growth in sales have positive impact. This result are in accordance with trade-off theory.

Ngo, Tram & Vu (2020) studied on impact of debt on companies' profitability in Vietnam during 2009-2017. They used sample data from non-financial listed company in Vietnamese Stock Exchange but excluded public enterprises and companies with negative equity. Total debt ratio represented as measure on debt while return of earnings before interest and tax on total assets represented companies' profitability. Firm size, tangible assets, growth rate, and taxes are included in the equation. By using generalized method of moments, they found a negative influence of debt on profitability.

Somathilake (2020) studied an effect of debt on 29 manufacturing listed companies' profitability in Colombo Stock Exchange in Sri Lanka during 2015-2019. By using regression analysis, they found significant impact from long-term debt to the companies' profitability in negative direction whilst short-term and total debt have insignificant impacts. The companies' profitability in this study mean return on asset and return on equity.

According to the literature review, the relationship between profitability and debt can be summarized in Table 2.3.

		Indicator of	Indicator of	
No.	Research Paper	Profitability	Debt	Relationship
1	Addae, A.A.,	Return on	(1) Short-term	Short-term debt-
	Nyarko-Baasi, M. &	equity (ROE)	debt-total	total assets ratio
	Hughes, D. (2013).		assets ratio,	positively affects
	The Effect of	VIIA	(2) Long-term	ROE whilst long-
	Capital Structure on	NOV	debt-total	term debt-total
	Profitability of		assets ratio,	assets ratio and
	Listed Firms in		and (3) Total	total debt-total
	Ghana. European		debt-total	assets ratio
	Journal of Business		assets ratio	negatively affect
	and Management,			ROE.
	5(31), 215-229.			
2	Kebewar, M.	(1) Net	Total debt-	Total debt-total
	(2014). The effect	income from	total assets	assets ratio has no
	of debt on corporate	operations-total	ratio	impact to net
	profitability	assets, (2)		income from
	Evidence from	Earnings before		operations-total
	French service	interest and tax-		assets, earnings
	sector. ReseachGate	total assets, and		before interest
		(3) return on		and tax-total
		assets (ROA)		assets, and ROA.

Table 2.3: Summary of Relationship between Profitability and Debt

		Indicator of	Indicator of	
No.	Research Paper	Profitability	Debt	Relationship
3	Raisa, M.L. &	Return on	(1) Short-	Both short-term
	Cristian, M.M.	assets (ROA)	term debt-total	debt-total
	(2015). Does Short		liabilities ratio	liabilities ratio
	Term Debt Affect	VIIA	and (2) Long-	and long-term
	Profitability?	KUN	term debt-total	debt-total
	Evidence from the		liabilities ratio	liabilities ratios
	Romanian Listed		7	have negative
	Companies. Annals			impact to ROA.
	of the "Constantin			
	Brancusi" University			~
	of Targu Jiu,			
	Economy Series,		64	
	Special Issue ECO-	VDED	19	
	TREND 2015 –			
	Performance,			
	Competitiveness,			
	Creativity, 228-233			

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

		Indicator of	Indicator of	
No.	Research Paper	Profitability	Debt	Relationship
4	Habib, H.J., Khan, F.	Return on assets	(1) Total debt-	ROA is
	& Wazir, M.I.	(ROA)	total assets	negatively
	(2016). Impact of		ratio, (2)	impacted by total
	Debt on Profitability	VIII	Short-term	debt-total assets
	of Firms; Evidence	KUV	debt-total	ratio, short-term
	form Non-Financial		assets ratio and	debt-total assets
	Sector of Pakistan.		(3) Long-term	ratio and long-
	City University		debt-total	term debt-total
	Research Journal,		assets ratio.	assets ratio
	6(1), 70-80.			
				(Continued)

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

		Indicator of	Indicator of	
No.	Research Paper	Profitability	Debt	Relationship
5	Muscettola, M. &	(1) Return on	(1) Financial	Return on sales,
	Naccarato, F. (2016).	equity (ROE),	debts on total	operating profit
	The Casual	(2) Return on	assets, (2) Total	on total debt,
	Relationship Between	sales, (3)	debt-total assets	EBITDA on
	Debt and	Operating	ratio, and (3)	investment,
	Profitability: The	profit on total	Total debt on	return on
	Case of Italy. Athens	debt, (4)	equity	investment, and
	Journal of Business	EBITDA on		ROA are
	and Economics, 2(1),	investment, (5)		negatively
	17-32	Return on		impacted by
		investment,		financial debts
	NO,	and (6) Return	64	on total assets,
		on assets	19	total debt-total
		(ROA)		assets ratio, and
				total debt on
				equity while
				ROE is
				negatively
				impacted only

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

		Indicator of	Indicator of	
No.	Research Paper	Profitability	Debt	Relationship
				by financial
				debts on total
				assets while total
		VIIA	_	debt-total assets
	10	KUN		ratio and total
	65			debt on equity
				has undefined
				relationship.
6	Ikapel, O.F. &	Return on	Long-term debt-	Long-term debt-
	Kajirwa, I.H. (2017).	assets (ROA)	total assets ratio	total assets ratio
	Analysis of long term			has negative
	debt and financial		6	impact with
	performance of state	VDFC		return on assets.
	owned sugar firms in			
	Kenya. International			
	Journal of Commerce			
	and Management			
	Research, 3(2), 108-			
	111			
				(Continued)

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt
		Indicator of	Indicator of		
No.	Research Paper	Profitability	Debt	Relationship	
7	Aziz, S. & Abbas,	(1) Return on	(1) Short-term	Short-term debt-	
	U. (2019). Effect of	assets (ROA),	debt-total assets,	total assets	
	Debt Financing on	(2) Return on	(2) Long-term	positively affects	
	Firm Performance:	equity (ROE),	debt- total	to ROA and	
	A Study on Non-	(3) Earnings per	assets, and (3)	ROE. Long-term	
	Financial Sector of	share, and (4)	Total debt-total	debt-total assets	
	Pakistan. Open	Gross profit	assets	positively affects	
	Journal of	margin		ROE. Total	
	Economics and			debt-total assets	
	Commerce, 2(1), 8-			has positive	
	15			impact to gross	
	NO.		64	profit margin	
		VDFD	19	while the rest	
				has negative	
				impact.	

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

(Continued)

		Indicator of	Indicator of		
No.	Research Paper	Profitability	Debt	Relationship	
8	Darapho, T. &	(1) Return on	(1) Total debt-	Total debt-total	
	Tongkong, S.	assets (ROA)	total assets and	assets and long-	
	(2019). Impact of	and (2) Return	(2) Long-term	term debt-total	
	Capital Structure on	on equity	debt-total assets	assets negatively	
	Firm Profitability of	(ROE)		affect ROA	
	Listed Companies in			while there is no	
	Energy and Utilities		70	impact on ROE.	
	Sector on the Stock				
	Exchange of				
	Thailand.				
	Chandrakasem				
	Rajabhat University		64		
	Journal of Graduate	VDFD	19		
	School, 15(2), 109-				
	122				
L				(Continued)	

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

		Indicator of	Indicator of		
No.	Research Paper	Profitability	Debt	Relationship	
9	Jones, A.S. & Edwin	Return on	(1) Total debt-	ROA is positive	
	O.A. (2019). Effect	assets (ROA)	assets ratio, (2)	and significantly	
	of Debt Financing		Short-term debt-	impacted from	
	on the Corporate	VIIA	assets ratio and	total debt-assets	
	Performance: A	NUN	(3) Long-term	ratio, short-term	
	Study of Listed		debt-asset ratio	debt- assets	
	Consumer Goods			ratio, and long-	
	firms in Nigeria.			term debt-assets	
	International Journal			ratio.	
	of Academic				
	Accounting, Finance				
	& Management		64		
	Research	VDFD	19		
	(IJAAFMR), 3(5),				
	26-34				

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

(Continued)

		Indicator of	Indicator of	
No.	Research Paper	Profitability	Debt	Relationship
10	Mamaro, L. &	Return on	(1) Lagged	Lagged return on
	Legotlo, T. (2020).	equity (ROE)	return on	equity and total
	The Impact of Debt		equity, (2)	debt-total assets
	Financing on	VIII	Long-term debt-	positively
	Financial	KU	total assets, and	influence ROE
	Performance:		(3) Total debt-	wile long-term
	Evidence from		total assets	debt-total assets
	Retail Firms Listed			ratio negatively
	on the JSE. Journal			affect the ROE.
	of Accounting and			
	Management,			
	10(3), 23-33		6V/	ľ
L		NDFC		(Continued)

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

		Indicator of	Indicator of		
No.	Research Paper	Profitability	Debt	Relationship	
11	Ngo, V.T., Tram,	Return of	Total debt-total	Total debt-total	
	T.X. & Vu, B.T.	earnings before	assets ratio	assets ratio	
	(2020). The Impact	interest and tax		negatively affects	
	of Debt on	on total assets		return of earnings	
	Corporate	KU		before interest	
	Profitability:			and tax on total	
	Evidence from		7	assets.	
	Vietnam. Journal of				
	Asian Finance,				
	Economics and				
	Business, 7(11),				
	835-842		64	ľ	
<u> </u>		NDEL		(Continued)	

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

		Indicator of	Indicator of	Relationship	
No.	Research Paper	Profitability	Debt		
12	Somathilake, H.	(1) Return	(1) Short-term	Long-term debt-	
	(2020). The Effect	on equity (ROE)	debt-total	total assets has	
	of Debt Financing	and (2) Return	assets, (2)	negative impact	
	on Corporate	on Asset (ROA)	Long-term	on ROE and	
	Profitability: Special	KUN	debt-total	ROA while short-	
	Reference to		assets, and (3)	term debt-total	
	Manufacturing		Total debt-	assets and total	
	Companies Listed in		total assets	debt-total assets	
	Colombo Stock			have no impacts.	
	Exchange.				
	International				
	Research Journal of		64		
	Modernization in	VDFD	19		
	Engineering				
	Technology and				
	Science, 2(5), 160-				
	166				

Table 2.3 (Continued): Summary of Relationship between Profitability and Debt

2.4 Conceptual Framework

In accordance with the literature review, the conceptual framework of this study can be illustrated by Figure 2.1 as the following.

Figure 2.1: Conceptual Framework





Dependent variable in this study is profitability as measured by net profit margin. It can be calculated by the following formula.

Net profit margin = $\frac{\text{Net Profit}}{\text{Total Revenue}} \times 100 \ (\%)$

Independent variables include;

1. Total Debt which is measured by a ratio of total liabilities to total assets. It

can be calculated by the following formula.

Ratio of total liabilities to total assets = $\frac{\text{Total Liabilities}}{\text{Total Assets}} \times 100 (\%)$

2. Short-Term Debt which is measured by a ratio of current liabilities to total assets. It can be calculated by the following formula.

Ratio of current liabilities to total assets = $\frac{\text{Current Liabilities}}{\text{Total Assets}} \times 100 (\%)$

3. Long-Term Debt which is measured by a ratio of non-current liabilities to

total assets. It can be calculated by the following formula.

Ratio of non-current liabilities to total assets = $\frac{\text{Non-current Liabilities}}{\text{Total Assets}} \times 100$

(%)

Controlling variables include;

1. Cost of Debt which is measured by a ratio of interest expense to total liabilities. It can be calculated by the following formula.

Ratio of interest expense to total liabilities = $\frac{\text{Interest Expenses}}{\text{Total Liabilities}} \times 100 (\%)$

2. Liquidity which is measured by current ratio. It can be calculated by the following formula.

 $Current ratio = \frac{Current Assets}{Current Liabilities} (times)$

3. Efficiency which is measured by total assets turnover. It can be calculated

by the following formula.

Total assets turnover = $\frac{\text{Total Revenue}}{(\text{Begining Total Assets}=\text{Ending Total Assets}) \div 2}$ (times)

4. Sale Growth which is measured by annual growth rate of sale revenue. It

can be calculated by the following formula.

Annualgrowthrateofsalerevenue=Current Year RevenuePrevious Year Revenue× 100 (%)

5. Company Size which is measured by total assets in natural logarithm. It can be calculated by the following formula.

Total assets in natural logarithm = Ln(Total assets)



CHAPTER 3

RESEARCH METHODOLOGY

The study of debt impact on listed hotel companies' profitability in the Stock Exchange of Thailand contains methodology as follow.

3.1 List of Hotel Companies

There are 13 companies in tourism & leisure sector in the Stock Exchange of Thailand (SET) as of 2021. Focusing only on hotel business and based on data availability, nine listed hotel companies are selected during the period 2000 - 2020. The selected hotel companies are listed in Table 3.1 as the following.

Table 3.1: List of Hotel	l Company	Listed in	The Stocl	k Exchange of	Thailand

No.	Hotel Company	Symbol
1	Asia Hotel Public Company Limited	ASIA
2	Central Plaza Hotel Public Company Limited	CENTEL
3	Dusit Thani Public Company Limited	DTC
4	The Erawan Group Public Company Limited	ERW
5	Grande Asset Hotels and Property Public Company Limited	GRAND
6	Laguna Resorts & Hotels Public Company Limited	LRH
7	OHTL Public Company Limited	OHTL
8	Royal Orchid Hotel (Thailand) Public Company Limited	ROH
9	Shangri-La Hotel Public Company Limited	SHANG

3.2 Sources of Data

This study relies on financial data in annual format of each hotel company presented in the statement of financial position and the statement of comprehensive income during 2000 – 2020. Note that financial data of Grande Asset Hotels and Property Public Company Limited (GRAND) are available only from 2003 to 2020. All data are obtained from the website of The Securities and Exchange Commission of Thailand. Totally, dataset of 177 company-years is utilized in this study. The summary of financial data utilized in this study and their sources can be presented in Table 3.2. Table 3.2: Source of Data

No.	Data	Unit	Sources
1	Current assets	THB	Statement of financial position
2	Total assets	THB	Statement of financial position
3	Current liabilities	THB	Statement of financial position
4	Total liabilities	THB	Statement of financial position
5	Non-current liabilities	THB	Statement of financial position
6	Owner's equities	THB	Statement of financial position
7	Sales	THB	Statement of comprehensive income
8	Total revenue	THB	Statement of comprehensive income
9	Interest expense	THB	Statement of comprehensive income
10	Net profit	THB	Statement of comprehensive income

Financial data in Table 3.2 will be employed to calculate the relevant financial ratios, including dependent, independent, and controlling variables in this study. They include;

- Net profit margin
- Ratio of total liabilities to total assets
- Ratio of short-term liabilities to total assets
- Ratio of long-term liabilities to total assets
- Ratio of interest expense to total liabilities
- Current ratio
- Total assets turnover
- Annual growth rate of sale revenue
- Total assets in natural logarithm

The calculation formulas of each variable are described earlier in the conceptual framework section.

3.3 Analytical Method

The analytical method in this study can be divided into four sections as the following.

3.3.1. Descriptive statistics is employed to analyzed import financial data from the statement of financial position and the statement of comprehensive income of nine hotel companies during 2000 – 2020. Such financial data include current assets, total assets, current liabilities, total liabilities, owner's equities, sales revenues, total revenue, interest expense and net profit. Mean values of these financial data of each hotel company will be calculated and presented to shed more light on these hotel companies' financial position and performance as well as their differences.

3.3.2. Profitability ratio which is net profit margin and three debt ratios including short-term debt to total assets ratio, long-term debt to total assets ratio, and

total debt to total assets ratio are calculated. Thereafter, descriptive statistics including mean values and trend lines will be analyzed in order to present the situation regarding profitability and debt of hotel companies listed in the Stock Exchange of Thailand.

3.3.3. The other financial ratios and variables are calculated. They include interest expense to total liabilities ratio, current ratio, total assets turnover and annual growth rate of sale revenue. Thereafter, mean values of these ratios and variables of each hotel company will be calculated and presented.

3.3.4. The analysis the impact of debt on hotel listed companies in the Stock Exchange of Thailand are performed by employing multiple regression analysis with dummy variables. There are two equations to be analyzed as the following.

Equation 1: Analysis of the impact of total debt on profitability

 $NMP = \beta_0 + \beta_1 TDB + \beta_2 CDB + \beta_3 CR + \beta_4 TAT + \beta_5 SG + \beta_6 LTA + \alpha_1 H_1 + \alpha_2 H_2$

$$+ \alpha_3 H_3$$

$$+\alpha_{4}H_{4} + \alpha_{5}H_{5} + \alpha_{6}H_{6} + \alpha_{7}H_{7} + \alpha_{8}H_{8} + \delta T + \mu$$

Equation 2: Analysis of the impact of short-term and long-term debt on profitability

$$NMP = \beta_0 + \beta_1 SDB + \beta_2 LDB + \beta_3 CDB + \beta_4 CR + \beta_5 TAT + \beta_6 SG + \beta_7 LTA + \alpha_1 H_1$$

$$+ \alpha_2 H_2$$

$$+\alpha_3H_3 + \alpha_4H_4 + \alpha_5H_5 + \alpha_6H_6 + \alpha_7H_7 + \alpha_8H_8 + \delta T + \mu$$

Where

NMP = Profitability as measured by net profit margin (%)

TDB = Total debt as measured by ratio of total liabilities to total assets (%)

SDB = Short-term debt as measured by ratio of short-term liabilities to total assets (%)

LDB = Long-term debt as measured by ratio of long-term liabilities to total assets (%)

CDB = Cost of debt as measured by ratio of interest expense to total liabilities (%)

CR = Liquidity as measured by current ratio (times)

TAT = Efficiency as measured by total assets turnover (times)

SG = Sale growth as measured by annual growth rate of sale revenue (%)

LTA = Companies size as measured by total assets in natural logarithm

 $H_1 = 1$ if Central Plaza Hotel; 0 otherwise

 $H_2 = 1$ if Dusit Thani; 0 otherwise

 $H_3 = 1$ if The Erawan Group; 0 otherwise

 $H_4 = 1$ if Grande Asset Hotels and Property; 0 otherwise

 $H_5 = 1$ if Laguna Resorts & Hotels; 0 otherwise

 $H_6 = 1$ if OHTL; 0 otherwise

 $H_7 = 1$ if Royal Orchid Hotel (Thailand); 0 otherwise

 $H_8 = 1$ if Shangri-La Hotel; 0 otherwise

Given that base group is Asia Hotel.

T = Time trend where T = 1 in 2001, 2 in 2002, 3 in 2003 and so on.

 β , α , δ = Regression coefficients

 $\mu = Residual term$

The multiple regression analysis is composed of four steps as the following.

1. Firstly, multi-collinearity problem will be investigated by employing the coefficients of correlation among explanatory variables, including independent variable and controlling variables. If the coefficient of correlation between any pair of variables is either greater than 0.7 or lower than -0.7, it means that there is a strong linear relationship between these two variables, indicating multi-collinearity problem. On the other hand, if the coefficients of correlation are between -0.7 and 0.7, it means there is

no strong relationship between explanatory variables, indicating no multi-collinearity problem.

2. In the second step, the overall significance of the regression equation will be investigated by employing F-statistics of overall significance and P-value. The regression equation is considered statistically significant if P-value is lower than significance level, implying that dependent variable is significantly related to at least one explanatory variable in the equation.

3. In the third step, the coefficient of determination (or R-square) will be examined to indicate the variation in dependent variable which can be explained by the regression equation. The greater the R-square is, the better the regression equation is.

4. Finally, the impact of debt on profitability of hotel companies will be investigated. In doing so, the statistical significance of debt, short-term debt and longterm debt, as well as other controlling variables, will be investigated by employing tstatistics and P-value. If the P-value is lower than significance level, these variables will statistically significant, implying significant impact on profitability.

3.4 Research Assumptions

Research assumptions in this study are as the following.

1. Total debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.

2. Short-term debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.

3. Long-term debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.

4. Cost of debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.

5. Liquidity has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.

6. Efficiency has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.

7. Sale growth has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.

8. Company size has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand.



CHAPTER 4

EMPIRICAL RESULTS

Results from the study on the impact of debt on profitability of listed hotel companies in the Stock Exchange of Thailand can be explained as the following.

4.1 Descriptive Statistics of Hotel Companies

Financial status of the listed hotel companies in the Stock Exchange of Thailand is explained by applying descriptive statistics analysis on their financial data during 2001-2020 as the following.

 Table 4.1: Average Value of Selected Items in the Statement of Financial Position

 during 2001-2020 (Unit: Million Baht)

	Current	Total	Current	Total	Owner's
Company					
	Assets	Assets	Liabilities	Liabilities	Equities
ASIA	222.94	6,857.25	536.35	3,680.17	3,177.09
CENTEL	1,955.68	19,093.59	4,420.88	11,465.17	7,628.42
DTC	1,700.02	8,241.46	1,670.15	3,725.34	4,516.12
ERW	986.05	12,798.40	2,250.27	8,685.30	4,113.10
GRAND	2,518.57	8,326.76	2,377.70	5,862.25	2,218.07
LRH	4,006.80	18,018.08	2,588.84	5,960.36	12,057.72
OHTL	354.60	2,564.25	677.51	1,466.39	1,097.86
ROH	419.24	1,350.97	238.21	287.30	1,063.67
SHANG	1,902.36	6,838.03	596.81	696.08	6,141.95

Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani, ERW = The Erawan Group, GRAND = Grande Asset Hotels and Property, LRH = Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, 2021)

According to the descriptive statistics presented in Table 4.1, Laguna Resorts & Hotels (LRH) has the greatest current assets and owner's equities with the average value of 4,006.80 and 12,057.72 million Baht, respectively. Central Plaza Hotel (CENTEL) has the greatest total assets, current liabilities, and total liabilities with the average value of 19,093.59, 4,420.88, and 11,465.17 million Baht, respectively. Asia Hotel (ASIA) has the lowest current assets with the average value of 222.94 million Baht. Royal Orchid Hotel (Thailand) (ROH) has the lowest total assets, current liabilities, total liabilities, and owner's equities with the average value of 1,350.97, 238.21, 287.30, and 1,063.67 million Baht, respectively. Note that this analysis is based on the average financial position data during 2001-2020.

Table 4.2: Average Value of Selected Items in the Statement of Comprehensive Income during 2001-2020 (Unit: Million Baht)

Company	Sale Revenue	Total	Interest	Net Profit
		Revenue	Expense	
ASIA	1,044.49	1,188.81	139.84	110.07
CENTEL	11,714.82	12,208.76	245.29	753.18
DTC	3,463.99	3,850.74	82.30	170.43
	•			(Continued)

(Continued)

Comprehensive 1	Income	during	2001-2020	(Unit:	Million
-----------------	--------	--------	-----------	--------	---------

В	al	ht	:)
			• •

0	G. L. D.	Total	Interest	N.4 D
Company	Sale Revenue	Revenue	Expense	Net Profit
ERW	3,943.12	4,083.07	315.11	177.11
GRAND	1,638.42	1,549.37	221.96	-50.22
LRH	4,406.85	4,659.65	149.67	383.78
OHTL	1,943.92	1,958.15	30.06	191.84
ROH	858.70	864.74	3.53	69.66
SHANG	1,827.48	1,921.17	6.43	382.43
Remark: ASIA	= Asia Hotel, CE	NTEL = Central	Plaza Hotel, DT	C = Dusit Thani
ERW = The Era	awan Group, GRA	ND = Grande A	sset Hotels and I	Property, LRH =

Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, Thailand, 2021)

Based on the descriptive statistics presented in Table 4.2, Central Plaza Hotel (CENTEL) has the greatest sale revenue, total revenue, and net profit with the average value of 11,714.82, 12,208.76, and 753.18 million Baht, respectively. The Erawan Group (ERW) has the highest interest expense with the average value of 315.11 million Baht. Royal Orchid Hotel (Thailand) (ROH) has the lowest sale revenue, total revenue, and interest expense with the average value of 858.70, 864.7, and 3.53 million Baht, respectively. Grande Asset Hotels and Property (GRAND) is the only company with

negative net profit with the average value of -50.22 million Baht. Note that this analysis is based on average comprehensive income data during 2001-2020.

4.2 Profitability and Debt of Hotel Companies

In this study, net profit margin represents profitability while debt is represented by debt-total assets ratio, short-term debt-total assets ratio, and long-term debt-total assets ratio. Profitability and debt of hotel companies in this study can be analyzed based on their average value and trend line as the following.

Table 4.3: Average Net Profit Margin and Leverage Ratios during 2001-2020 (Unit: %)

Company	Net Profit Margin	Debt-Total Assets Ratio	Short Term Debt-Total Assets Ratio	Long Term Debt-Total Assets Ratio
ASIA	1.72	62.82	9.49	53.33
CENTEL	5.52	58.38	23.20	35.17
DTC	4.91	38.69	19.46	19.23
ERW	2.12	66.90	17.55	49.35
GRAND	-9.20	69.69	28.57	41.12
LRH	6.73	32.10	14.37	17.73
OHTL	7.23	55.81	27.24	28.57
ROH	2.45	21.33	17.49	3.84
SHANG	12.34	10.64	9.15	1.49

Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani,

ERW = The Erawan Group, GRAND = Grande Asset Hotels and Property, LRH =

Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, 2021)

According to descriptive statistics presented in Table 4.3, Shangri-La Hotel (SHANG) has the highest net profit margin whilst it has the lowest debt-total assets ratio, short-term debt-total assets ratio, and long-term debt-total assets ratio with the average value of 12.34%, 10.64%, 9.15%, and 1.49%, respectively. Grande Asset Hotels and Property (GRAND) has the lowest net profit margin whilst its debt-total assets ratio and short-term debt-total assets ratio are the highest with the average value of -9.20%, 69.69%, and 28.57%, respectively. Asia Hotel (ASIA) has the highest longterm debt-assets ratio with the value of 53.33%. These results imply that debt-total assets ratio and short-term debt-total assets ratio have negative impact to net profit margin. That is, the higher debt-total assets ratio and short-term debt-total assets ratio lead to the lower net profit margin. In addition, long-term debt-total assets ratio also has negative impact to net profit margin due to data of ASIA in Table 4.3. ASIA has the highest long-term debt-total assets ratio, while its debt-total assets ratio and shortterm debt-total assets ratio are also very high ranked in the second highest among the other hotels with the average value of 62.82% and 9.49%, respectively. Asia has the second lowest net profit margin with the average value of 1.72%.



Figure 4.1: Net Profit Margin of Hotel Companies during 2001-2020

Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani, ERW = The Erawan Group, GRAND = Grande Asset Hotels and Property, LRH = Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, 2021)

Based on Figure 4.1, Asia Hotel (ASIA) not only has the lowest net profit margin among the others during 2001-2020 with the value of -278.40% (in 2001) but

also has the highest net profit margin with the value of 152.40% (in 2005). Furthermore, all hotels have the positive net profit margin during 2016-2018 but all of them have the negative net profit margin in 2020, mainly impacted from Covid-19 pandemic. Except the loss in 2020, Central Plaza Hotel (CENTEL), Dusit Thani (DTC), and OHTL experienced the negative net profit margin only once with the value of -0.10% in 2010, -3.76% in 2009, and 28.30% in 2019, respectively.

Figure 4.2: Debt-Total Assets Ratio of Hotel Companies during 2001-2020



Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani, ERW = The Erawan Group, GRAND = Grande Asset Hotels and Property, LRH = Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, 2021)

Base on Figure 4.2, all hotels have the positive debt-total assets ratio, implying that all of them have debt in their capital structure during 2001-2020. Asia Hotel (ASIA) has the highest debt-total assets ratio among the others during 2001-2020 with the value

of 129.38% (in 2004) whilst Shangri-La Hotel (SHANG) has the lowest debt-total assets ratio with the value of 3.88% in 2020.

Figure 4.3: Short Term Debt-Total Assets Ratio of Hotel Companies during 2001-



2020

Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani, ERW = The Erawan Group, GRAND = Grande Asset Hotels and Property, LRH = Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, 2021)

Base on Figure 4.3, all hotels have the positive short-term debt-total assets ratio, indicating that all of them have short-term debt in their capital structure in 2001-2020. This situation is considered common because most of short-term debt occurs from operation. Grande Asset Hotels and Property (GRAND) has the highest short-term debt-total assets ratio among the others during 2001-2020 with the value of 54.19% (in

2012) whilst Shangri-La Hotel (SHANG) has the lowest short-term debt-total assets ratio with the value of 2.46% in 2020.



Figure 4.4: Long Term Debt-Total Assets Ratio of Hotel Companies during 2001-2020

Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani, ERW = The Erawan Group, GRAND = Grande Asset Hotels and Property, LRH = Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, 2021)

Base on Figure 4.4, Dusit Thani (DTC) and Royal Orchid Hotel (Thailand) (ROH) are the only two hotels which have zero long-term debt-total assets ratio in a certain year during 2001-2020. That is, these two hotels have no long-term debt in their capital structure during 2002-2003 and 2003-2008, respectively. Asia Hotel (ASIA) has the greatest long-term debt-total assets ratio among the others during 2001-2020 with the value of 106.38% (in 2003). Beside zero long-term debt, Shangri-La Hotel

(SHANG) has the lowest long-term debt-total assets ratio among the others during 2001-2020 with the value of 0.25% (in 2001).

4.3 Important Financial Ratios of Hotel Companies

Beside profitability and leverage ratios, this study also focuses on other important financial ratios and performance indicators of hotel companies listed in the Stock Exchange of Thailand. They include cost of debt, current ratio, total asset turnover, and sale growth rate. Table 4.4 below presents the average values of these ratios and indicators of nine hotel companies during 2001 – 2020.

Company	Cost of Debt (%)	Current Ratio (times)	Total Assets Turnover (times)	Sale Growth Rate (%)
ASIA	3.83	0.54	0.19	4.49
CENTEL	2.01	0.47	0.70	8.09
DTC	3.01	1.11	0.52	1.29
ERW	3.66	0.46	0.33	2.07
GRAND	3.75	1.13	0.22	37.12
LRH	2.77	1.56	0.28	4.01
OHTL	2.18	0.56	0.85	-2.00
ROH	0.86	2.27	0.65	-0.70
SHANG	0.77	4.05	0.29	0.23

Table 4.4: Average Value of Selected Variables during 2001-2020

Remark: ASIA = Asia Hotel, CENTEL = Central Plaza Hotel, DTC = Dusit Thani, ERW = The Erawan Group, GRAND = Grande Asset Hotels and Property, LRH = Laguna Resorts & Hotels, OHTL = OHTL, ROH = Royal Orchid Hotel (Thailand), and SHANG = Shangri-La Hotel. Data of GRAND is only available from 2003-2020 (The Securities and Exchange Commission, 2021) According to the descriptive statistics presented in Table 4.4, Asia Hotel (ASIA) has the greatest cost of debt and total asset turnover with the average value of 3.83% and 0.19 times, respectively. The Erawan Group (ERW) has the lowest interest expense with the average value of 0.46 times. Grande Asset Hotels and Property (GRAND) has the highest sale growth rate with the average value of 37.12%. OHTL has the highest total assets turnover with the average value of 0.85 times. Shangri-La Hotel (SHANG) has the lowest cost of debt whilst its current ratio is the highest with the average value of 0.77% and 4.05 times, respectively.

4.4 Results from Multiple Regression Analyses

This study employs the multiple linear regression analysis to examine the impact of debt on profitability of nine hotel companies listed in the Stock Exchange of Thailand during 2001 - 2020.

Table 4.5 below presents the correlation coefficients among explanatory variables in the regression analyses. The findings reveal that there appears to be no pair of these variables which have correlation coefficient greater than 0.7 and lower than - 0.7, implying no strong relationship between independent variables. Consequently, there is no multi-collinearity problem in the regression analyses in this study.

Note that TDB (total debt) and LDB (long-term debts) are independent variables in different model. As a result, although the correlation coefficient between these two variable is greater than 0.7, it does not cause the multi-collinearity problem.

Variable	TDB	SDB	LDB	CDB	CR	TAT	SG	LTA
TDB	1.000							
SDB	0.466	1.000						
LDB	0.925	0.095	1.000					
CDB	0.412	0.121	0.412	1.000				
CR	-0.560	-0.418	-0.451	-0.390	1.000			
TAT	-0.128	0.291	-0.269	-0.274	-0.113	1.000		
SG	0.057	0.128	0.010	0.136	-0.085	0.136	1.000	
LTA	0.225	-0.090	0.293	0.200	-0.105	-0.468	0.009	1.000

Table 4.5: Correlation Coefficient Table

Remark: TDB = Total Debt, SDB = Short-Term Debt, LDB = Long-Term Debt, CDB = Cost of Debt, CR = Current Ratio, TAT = Total Asset Turnover, SG = Sale Growth, and LTA is Company Size

The results from the multiple linear regression analyses with dummy variables in this study is divided into two parts, including (1) the impact of total debt on profitability and (2) the impact of short-term and long-term debt on profitability, presented in Table 4.6 and Table 4.7, respectively.

Variable	Description	Coefficient	Std. Error	P-Value
TDB	Total debt	-0.696	0.169	***0.000
CDB	Cost of debt	0.609	1.866	0.744
CR	Liquidity	-2.323	2.059	0.261
TAT	Efficiency	80.256	25.760	***0.002
SG	Sale growth	0.109	0.082	0.183
LTA	Company size	15.296	10.081	0.131
H ₁	Central Plaza Hotel	-53.568	21.352	**0.013
H ₂	Dusit Thani	-40.463	13.315	***0.003
H ₃	The Erawan Group	-17.628	13.470	0.192
H ₄	Grande Asset Hotels and Property	-12.925	10.932	0.239
H ₅	Laguna Resorts & Hotels	-35.449	14.911	**0.019
H ₆	OHTL	-35.727	17.488	**0.043
H ₇	Royal Orchid Hotel (Thailand)	-34.433	19.042	*0.072
H ₈	Shangri-La Hotel	-23.761	14.885	0.112
Т	Time trend	-0.758	0.588	0.199
Constant	$\langle O \rangle$	-308.931	229.923	0.181
Dependen	t variable	nV	Net p	rofit margin
Observatio	on UL	17		177.000
F-stat for	overall significance			4.310
P-value fo	r overall significance			***0.000
R-square				0.286

Table 4.6: Impact of Total Debt on Profitability

Remark: *, ** and *** indicate statistical significance at 10, 5 and 1 percent level, respectively.

The results from the multiple regression analysis on the impact of total debt on profitability of hotel companies listed in the Stock Exchange of Thailand, presented in Table 4.6, can be summarized as the following. 1. F-Statistics of overall significance is 4.310 while P-Value is 0.000 which is lower than the significance level of 0.01, implying the overall significance of the regression equation. That is, profitability of hotel companies listed in the Stock Exchange of Thailand is significantly related to at least one explanatory variable in the equation.

2. R-square is 0.286, implying that 28.6 percent of total variation in net profit margin of listed hotel companies can be explained by the regression equation.

3. Total debt (TDB) has regression coefficient of -0.696 and P-Value of 0.000 which is lower than significance level of 0.01, implying that the total debt which is measured by a ratio of total liabilities to total assets significantly impacted profitability of hotel companies listed in the Stock Exchange of Thailand in the negative direction. That is, one percent increase in the ratio of total liabilities to total assets will cause the net profit margin of listed hotel companies to decrease by 0.696%.

4. Cost of debt (CDB) has P-Value of 0.744 which is higher than significance level of 0.10, implying that cost of debt which is measured by a ratio of interest expenses to total liabilities has no statistically significant impact on profitability of listed hotel companies.

5. Liquidity (CR) has P-Value of 0.261 which is higher than significance level of 0.10, implying that liquidity which is measured by current ratio has no statistically significant impact on profitability of listed hotel companies.

6. Efficiency (TAT) has regression coefficient of 80.256 and P-Value of 0.002 which is lower than significance level of 0.01, implying that efficiency which is measured by total assets turnover significantly affects profitability of hotel companies listed in the Stock Exchange of Thailand in the positive direction. That is, one time

increase in total assets turnover will lead to 80.256 percent increase in net profit margin of listed hotel companies.

7. Sale growth (SG) has P-Value of 0.183 which is higher than significance level of 0.10, implying that sale growth which is measured by annual growth rate of sale revenue has no statistically significant impact on profitability of listed hotel companies.

8. Company size (LTA) has P-Value of 0.131 which is higher than significance level of 0.10, implying that size of company which is measured by total assets in natural logarithm has no statistically significant impact on profitability of listed hotel companies.

9. Time Trend (T) has P-Value of 0.199 which is higher than significance level of 0.10, implying that net profit margin of listed hotel companies does not exhibit a particular trend.

Net profit margin equation with total debt as independent variable can be expressed as the following.

 $NMP = -308.931 - 0.696TDB + 0.609CDB - 2.323CR + 80.256TAT + 0.109SG + 15.296LTA - 53.568H_1 - 40.463H_2 - 17.628H_3 - 12.925H_4 - 35.449H_5 - 35.727H_6 - 34.433H_7 - 23.761H_8 - 0.758T$

Variable	Description	Coefficient	Std. Error	P-Value
SDB	Short-Term debt	-0.773	0.374	**0.040
LDB	Long-Term debt	-0.680	0.184	***0.000
CDB	Cost of debt	0.627	1.873	0.738
CR	Liquidity	-2.475	2.167	0.255
TAT	Efficiency	80.421	25.846	***0.002
SG	Sale growth	0.110	0.082	0.183
LTA	Company size	15.264	10.111	0.133
H_1	Central Plaza Hotel	-52.248	22.164	**0.020
H ₂	Dusit Thani	-39.081	14.632	*0.008
H ₃	The Erawan Group	-16.952	13.822	0.222
H4	Grande Asset Hotels and Property	-11.058	13.622	0.418
H5	Laguna Resorts & Hotels	-34.298	15.764	**0.031
H ₆	OHTL	-34.057	18.970	*0.074
H ₇	Royal Orchid Hotel (Thailand)	-32.811	20.349	0.109
H ₈	Shangri-La Hotel	-22.359	16.114	0.167
Т	Time trend	-0.762	0.590	0.198
Constant	NDF	-308.341	230.616	0.183
Dependen	t variable	Net profit ma		profit margin
Observatio	on			177.000
F-stat for o	overall significance			4.020
P-value fo	r overall significance			***0.000
R-square				0.287

Table 4.7: Impact of Short-Term and Long-Term Debt on Profitability

Remark: *, ** and *** indicate statistical significance at 10, 5 and 1 percent level, respectively.

The result from multiple regression analysis on the impact of short-term and long-term debt on profitability of hotel companies listed in the Stock Exchange of Thailand, presented in table 4.7, can be summarized as following.

1. F-Statistics of overall significance is 4.020 while P-Value is 0.000 which is lower than significance level of 0.01, implying the overall significance of the regression analysis equation. That is, profitability of hotel companies listed in the Stock Exchange of Thailand is significantly related to at least one explanatory variables in the equation.

2. R-square is 0.287, implying that 28.7 percent of total variation in net profit margin of hotel companies can be explained by the regression analysis.

3. Short-term debt (SDB) has regression coefficient of -0.773 and P-Value of 0.040 which is lower than significance level of 0.05, implying that short-term debt which is measured by a ratio of current liabilities to total assets significantly impacted profitability of hotel companies listed in the Stock Exchange of Thailand in the negative direction. That is, one percent increasing in the ratio of current liabilities to total assets will cause the net profit margin of listed hotel companies to decrease by 0.773%.

4. Long-term debt (LDB) has regression analysis coefficient of -0.680 and P-Value of 0.000 which is lower than significance level of 0.01, implying that long-term debt which is measured by a ratio of non-current liabilities to total assets significantly impacted profitability of hotel companies listed in the Stock Exchange of Thailand in the negative direction. That is, one percent increasing of the ratio of current liabilities to total assets will cause the net profit margin of listed hotel companies to decrease by 0.680%. 5. Cost of debt (CDB) has P-Value of 0.738 which is higher than significance level of 0.10, implying that cost of debt which is measured by a ratio of interest expense to total liabilities has no statistically impact on profitability of listed hotel companies.

6. Liquidity (CR) has P-Value of 0.255 which is higher than significance level of 0.10, implying that liquidity which is measured by current ratio no statistically impact on profitability of listed hotel companies.

7. Efficiency (TAT) has regression analysis coefficient of 80.421 and P-Value of 0.002 which is lower than significance level of 0.01, implying that efficiency which is measured by total assets turnover significantly affects profitability of hotel companies listed in the Stock Exchange of Thailand in the positive direction. That is, one time increase in total assets turnover will lead to 80.421 percent increase in net profit margin of listed hotel companies.

8. Sale growth (SG) has P-Value of 0.183 which is higher than significance level of 0.10, implying that sale growth which is measured by annual growth rate of sale revenue has no statistically impact on profitability of listed hotel companies.

9. Company size (LTA) has P-Value of 0.133 which is higher than significance level of 0.10, implying that size of company which is measured by total assets in natural logarithm has no statistically impact on profitability of listed hotel companies

10. Time Trend has P-Value of 0.198 which is higher than significance level of 0.10, implying that net profit margin of listed hotel companies does not exhibit a particular trend.

Base on the result, short-term debt (SDB) has a greater impacted on profitability of hotel companies listed in the Stock Exchange of Thailand than long-term debt (LDB) by 0.093%.

Net profit margin equation with short-term and long-term debt as independent variable can be expressed as the following.

$$NMP = -308.341 - 0.773SDB - 0.680LDG + 0.627CDB - 2.475CR + 80.421TAT + 0.110SG + 15.264LTA - 52.248H_1 - 39.081H_2 - 16.952H_3 - 11.058H_4 - 34.298H_5 - 34.057H_6 - 32.811H_7 - 22.359H_8 - 0.762T$$

Based on the analyses impact of debt on profitability of hotel companies listed in the Stock Exchange of Thailand presented in Table 4.6 and Table 4.7, research assumptions can be summarized as the following.

1. The assumption that total debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered valid since total debt is found statistically significant at 1% significance level.

2. The assumption that short-term debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered as valid since short-term debt is found statistically significant at 5% significance level.

3. The assumption that long-term debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered as valid since long-term debt is found statistically significant at 1% significant level.

4. The assumption that cost of debt has the negative impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered invalid since cost of debt is not found statistically significant at any significance level.

5. The assumption that liquidity has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered invalid since liquidity is not found statistically significant at any significant level. 6. The assumption that efficiency has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered as valid since efficiency is found statistically significant at 1% significant level.

7. The assumption that sale growth has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered invalid since sale growth is not found statistically significant at any significant level.

8. The assumption that company size has the positive impact on the profitability of hotel companies listed in the Stock Exchange of Thailand is considered invalid since size of company is not found statistically significant at any significant level.

The summary result of research assump	ptions can be illustrated in Table 4.8
Table 4.8: Summary Result of Research Assum	nptions

Variable	Description	Assumption	P-Value	Result
DB	Total debt	Negative	Significant	Valid
SDB	Short-Term debt	Negative	Significant	Valid
LDB	Long-Term debt	Negative	Significant	Valid
CDB	Cost of debt	Negative	Insignificant	Invalid
CR	Liquidity	Positive	Insignificant	Invalid
TAT	Efficiency	Positive	Significant	Valid
SG	Sale growth	Positive	Insignificant	Invalid
LTA	Company size	Positive	Insignificant	Invalid
CHAPTER 5

CONCLUSION

5.1 Research Summary

Objectives of this study are to examine the situation regarding profitability and debt financing as well as to investigate the impact of debt on profitability of nine hotel companies listed in the Stock Exchange of Thailand during 2001 – 2020, including Asia Hotel, Central Plaza Hotel, Dusit Thani, The Erawan Group, Grande Asset Hotels and Property, Laguna Resorts & Hotels, OHTL, Royal Orchid Hotel (Thailand), and Shangri-La Hotel. Descriptive statistic including mean values and trend lines and multiple linear regression analysis with dummy variables are employed in this study.

Net profit margin is assigned as a dependent variable which represents profitability while total liabilities to total assets ratio, current liabilities to total assets ratio, and non-current liabilities to total assets ratio are assigned as independent variables which represent total debt, short term debt and long term debt, respectively. In addition, controlling variables include cost of debt, liquidity, efficiency, sale growth, and company size which are measured by interest expense to total liabilities ratio, current ratio, total assets turnover, growth rate of sale revenue, and total asset in natural logarithm respectively.

In terms of profitability which is measured by net profit margin, during 2001-2020, Asia Hotel had both the highest and lowest net profit margin among hotel companies in this study. The highest net profit margin of studied hotel companies was in 2005 with the value of 152.40 percent whilst the lowest record was in 2001 with the value of -279.40 percent. All hotels in this study had the positive net profit margin during 2016-2018 whilst all of them had the negative net profit margin in 2020 due to

the impact from Covid-19 pandemic. Beside the loss in 2020, Central Plaza Hotel, Dusit Thani and OHTL experienced the negative net profit margin only once with the value of -0.10% in 2010, -3.76% in 2009, and 28.30% in 2019 respectively.

Debt financing in this study is measured by total liabilities to total assets ratio, current liabilities to total assets ratio, and non-current liabilities to total assets ratio. During the study period, all hotels had the positive total liabilities to total assets ratio, implying that all of them had debt financing which was obtained from both short-term and long-term. However, Dusit Thani and Royal Orchid Hotel (Thailand) had no long-term debt during 2002 – 2003 and 2003 – 2008, respectively.

During 2001 – 2020, the highest total liabilities-total assets ratio of hotels was from Asia Hotel with the value of 129.38 percent in 2004 whilst Shangri-La Hotel had the lowest total liabilities-total assets ratio with the value of 3.88 percent in 2020. Focusing on short-term debt, Grande Asset Hotels and Property had the highest current liabilities-total assets ratio among the others during 2001 – 2020 with the value of 54.19 percent in 2012 whilst Shangri-La Hotel had the lowest current liabilities-total assets ratio was highest recorded in 2003 with the value of 106.38 percent which was from Asia Hotel whilst Shangri-la Hotel also had the lowest non-current liabilities-total assets ratio among the others during the study period with the value of 0.25 percent in 2001.

After performing the multiple regression analysis to examine the impact of total debt on profitability of listed hotel company, the findings reveal that the regression equation is overall significant at 1 percent significance level with R-square of 0.286, implying that 28.6 percent of total variation in net profit margin of listed hotel companies can be explained by the regression equation. Total debt which is measured

by a ratio of total liabilities to total assets has negative impact on profitability of the listed hotel companies with the regression coefficient of -0.696, implying that one percent increase in the ratio of total liabilities to total assets will cause the net profit margin of listed hotel companies to decrease by 0.696 percent. Moreover, efficiency which is measured by total asset turnover has significantly positive impact on profitability of the listed hotel companies with the regression coefficient of 80.256, implying that one time increase in total assets turnover will lead to 80.256 percent increase in net profit margin of listed hotel companies.

After performing the multiple regression analysis to examine the impact of short term and long term debt on profitability of listed hotel company, the findings reveal that the regression equation is also overall significant at 1 percent significance level the R-square of 0.287, implying that 28.7 percent of total variation in net profit margin of listed hotel companies can be explained by the regression equation. Short-term debt which is measured by a ratio of current liabilities to total assets has negative impact on profitability of the listed hotel companies with the regression coefficient of -0.773, implying that one percent increase in the ratio of short-term liabilities to total assets will cause the net profit margin of listed hotel companies to decrease by 0.773 percent.

Long-term debt which is measured by a ratio of non-current liabilities to total assets also has negative impact on profitability of the listed hotel companies with the regression coefficient of -0.680, implying that one percent increase in the ratio of long-term liabilities to total assets will cause the net profit margin of listed hotel companies to decrease by 0.680 percent. In addition, efficiency which is measured by total asset turnover has positive impact on profitability of the listed hotel companies with the

regression coefficient of 80.421, implying that one time increase in total assets turnover will lead to 80.421 percent increase in net profit margin of listed hotel companies.

5.2 Discussion

This study found that total debt and profitability are negatively related. That is, an increase in total debt is likely to cause the profitability of the listed hotel companies to decrease since the greater debt will cause the greater expense incurred for the payment of debt, both principal and interest payment, leading to the lower profit. This result is complied with Addae, Nyarko-Baasi & Hughes (2013), Habib, Khan, & Wazir (2016), and Muscettola & Naccarato (2016) which also found the negative impact of total debt on profitability as measured by ROE, ROA, and return on sales respectively. However, this result is contradicted to Aziz & Abbas (2019) which found the positive impact of total debt on profitability as measured by gross profit margin. The explanation of positive relationship between debt and profitability is that debt enables company to invest in new profitable projects, leading to the greater profit. Nevertheless, in case of listed hotel companies in Thailand, debt is likely to be financial burden rather than fuel of growth.

Short-term debt was also found that it negatively related to profitability in this study. That is, an increase in short-term debt is likely to cause the profitability of the listed hotel companies to decrease. This result is complied with Raisa & Cristian (2015) and Habib, Khan, & Wazir (2016) which also found the negative impact of short-term debt on profitability as measured by ROA. However, this result is contradicted to Addae, Nyarko-Baasi & Hughes (2013) which found the positive effect of short-term debt on profitability as measured by ROE.

Similar to total and short-term debt, long-term debt and profitability are also negatively related. That is, an increase in long-term debt is likely to cause the profitability of the listed hotel companies to decrease. This result is complied with Addae, Nyarko-Baasi & Hughes (2013) and Ikapel & Kajirwa (2017) which also found the negative impact of short-term debt on profitability as measured by ROE and ROA respectively. However, this result is contradicted to Aziz & Abbas (2019) which found the positive effect of long-term debt on profitability as measured by ROE. However, the impact of long-term debt on profitability of the listed hotel companies is less than the impact from short-term debt. The reason behind is not only tax benefit on the interest expense of long-term debt but also long-term debt is regularly used as investment fund for new company's assets in order to generate greater revenue from current operation.

Interestingly, cost of debt and profitability are insignificantly related in this study. That is, an increasing or decreasing in cost of debt is likely to cause nothing to the profitability of the listed hotel companies. This result is complied with Giwa (2019) which also found insignificant relationship between cost of debt and profitability as measured by ROA. However, the result is contradicted to Santosuosso (2014) which found negative impact of cost of debt on profitability as measured by ROA. The explanation of negative relationship between cost of debt and profitability is that there is indirect cost from relationship of companies and lenders. That is, weak relationship result in higher cost of debt and leading to low profitability. However, in case of listed hotel companies in Thailand, they have strong reputation and experience with many good supporters such as banks that enables low cost of debt financing, leading to insignificant impact on profitability.

In this study, another variable that is related to profitability is efficiency which is measured by total assets turnover. That is, increasing in total assets turnover is likely to cause the profitability of the listed hotel companies to increase. This result is complied with Mauawar (2019) which also found the positive impact of total assets turnover on profitability as measured by ROE. However, this result is different from Warrad & Omari (2015) and Shahniaa, Purnamasarib, Hakimc, & Endria (2020) which found none relationship between total assets turnover and profitability as measured by ROA. The explanation of none relationship between total assets turnover and profitability is that total assets turnover ratio and ROA have similar factors in the calculation which is sale and total assets while cost of sale is the only difference. However, in this study, profitability is measured by net profit margin that does not contain the same divider and focuses more on operational result. That is, higher efficiency result in better operational performance. Moreover, hotel industry requires high assets investment in the beginning which the majority is on building structure, facility system, and room setup while only small investments are required to refresh their products and support operation so their assets value is quite stable then increasing on total asset turnover mainly contributed from revenue which reflect the profitability at the same.

Liquidity which is measured by current ratio and profitability are also insignificantly related in this study. That is, an increasing or decreasing in current ratio is likely to cause nothing to the profitability of the listed hotel companies. This result is complied with Warrad (2014) which also found insignificant impact of total current ratio on profitability as measured by net profit margin. However, this result is contradicted to Shahniaa, Purnamasarib, Hakimc, & Endria (2020) which found the negative impact of current ratio on profitability as measured by ROA. The explanation of negative relationship between current ratio and profitability is that current assets contain supply of raw materials and inventory of goods in process which already generated costs but not yet sell to customers and implying no revenue. Nevertheless, in case of listed hotel companies in Thailand, there is no raw materials and inventory of goods in process so the impact does not occur.

Sale growth and profitability are in significantly related in this study. That is, an increasing or decreasing in sale growth is likely to cause nothing to the profitability of the listed hotel companies. This result is complied with Jayasiri, N. & Sanjaya, R.S. (2015) which also found no impact of sale growth on profitability as measured by ROA and net profit margin. However, this result is contradicted to Mamaro & Legotlo (2020) which found the positive impact of sale growth on profitability as measured by ROE. The explanation of positive relationship between sale growth and profitability is that firm relied on internal fund which contain lower cost when expanding the sale, leading to the greater profit. Nevertheless, in case of listed hotel companies in Thailand, debt financing is a preferred choice when they expand their business. In case there is no expanding, hotel industry has the same supply for sale over year so sale growth is limited and not significant impact the profitability.

Company size which is measured by total assets in natural logarithm and profitability are insignificantly related in this study. That is, an increasing or decreasing in current ratio is likely to cause nothing to the profitability of the listed hotel companies. This result is complied with Abeyrathna, G. & Priyadarshana, M. (2019) which also found no impact of firm size on profitability as measured by net profit and ROA. However, this result is contradicted to Aziz & Abbas (2019) which found the positive impact of company size on profitability as measured by gross profit margin. The explanation of positive relationship between company size and profitability is that firm size enables company to reach economy of scale, leading to the greater profit. Nevertheless, in case of listed hotel companies in Thailand, economy of scale does not reach as a company level since they have individual operation in each location as well as various requirements for each hotel brand standard.

5.3 Recommendations for Further Application

Based on results from this study, investors are recommended to evaluate hotel companies' financial position by focusing on their debt ratio and total asset turnover. Hotel companies that have low debt ratio but high total assets turnover should be considered. However, it would be difficult for management to operate the hotel company without debt since hotel industry naturally contain high assets and may require debt financing to support. Then Trade - Off Theory should be applied and it is the managements' responsibility to find an optimal balance on advantage and disadvantage from debt financing in order to reduce risk of bankruptcy while gain the most benefit from the debt financing. Increasing on total asset turnover would increase the interest level for investor and help to yield the company's performance but high operating profit alone may not be sufficient. It is also the managements' responsibility to source for low cost debt financing in order to minimize interest expenses. Since debt has negative impact to profitability, the policy makers such as the Stock Exchange of Thailand and the Securities and Exchange Commission should set ceiling on debt ratio for listed companies in the Stock Exchange of Thailand which ratio value can be varied base on requirement of each industry.

5.4 Recommendations for Further Research

This study focus on impact of debt on profitability as only measured by net profit margin of hotel companies listed in the Stock Exchange of Thailand during 2001-2020. It is recommended to have further research by changing profitability measurements such as return on assets (ROA) and return on equity (ROE) in order to analysis if there are any differences. Moreover, due to the limitation of data in this study that contain only nine listed hotel companies in the Stock Exchange of Thailand and they are large size company, the result may not applicable to other hotels. Hence, expanding the study data to cover unlisted hotel companies outside the Stock Exchange of Thailand is suggested. Since there will be various size of hotels in the data, grouping them into small, medium, and large would be recommended with expectation on suitable in further application.

BIBLIOGRAPHY

- Abeyrathna, G. & Priyadarshana, M. (2019). Impact of Firm size on Profitability. International Journal of Scientific and Research Publications, 9(6), 561-564
- Addae, A.A., Nyarko-Baasi, M., and Hughes, D. (2013). The Effects of Capital Structure on Profitability of Listed Firms in Ghana. European Journal of Business and Management, 5(31), 215-229
- Aziz, S. & Abbas, U. (2019). Effect of Debt Financing on Firm Performance: A Study on Non-Financial Sector of Pakistan. Open Journal of Economics and Commerce, 2(1), 8-15
- Cekrezi, A. (2013). A literature review of the trade-off theory of capital structure. *Iliria International Review - 2013/1*
- Corporate Finance Institute (2021). *Finance Articles:* Retrieve from https://corporatefinanceinstitute.com/resources/knowledge/finance/
- Darapho, T. & Tongkong, S. (2019). Impact of Capital Structure on Firm Profitability of Listed Companies in Energy and Utilities Sector on the Stock Exchange of Thailand. *Chandrakasem Rajabhat University Journal of Graduate School*, 15(2), 109-122
- Giwa, Y.S. (2019). Effect of Cost of Capital on Financial Performance of Listed Construction Companies in Nigeria. Unpublished master's thesis, Nigerian Defence Academy, Kaduna, Nigerai.

- Habib, H.J., Khan, F. & Wazir, M.I. (2016). Impact of Debt on Profitability of Firms;
 Evidence form Non-Financial Sector of Pakistan. *City University Research Journal*, 6(1), 70-80.
- Ikapel, O.F. & Kajirwa, I.H. (2017). Analysis of long term debt and financial performance of state owned sugar firms in Kenya. *International Journal of Commerce and Management Research*, 3(2), 108-111

Investopedia (2021). Dictionary: Retrieve form

https://www.investopedia.com/financial-term-dictionary-4769738

Investopedia (2021). Financial Statement Analysis. Retrieve from https://www.investopedia.com/terms/f/financial-statementanalysis.asp#:~:text=Financial%20statement%20analysis%20is%20the,financi al%20performance%20and%20business%20value.

- Java, R. (2021). *Explanations Financial statement analysis*. Retrieve from https://www.accountingformanagement.org/explanation/accounting-ratios-analysis//
- Jayasiri, N. & Sanjaya, R.S. (2015). The Cause-Effect Relationship between Growth and Profitability; Evidence from Listed Manufacturing Companies in Sri Lanka. *Peradeniya University International Research Sessions (iPURSE)* (pp. 1-15). Peradeniya: University of Peradeniya.
- Jones, A.S. & Edwin O.A. (2019). Effect of Debt Financing on the Corporate Performance: A Study of Listed Consumer Goods firms in Nigeria.

International Journal of Academic Accounting, Finance & Management Research (IJAAFMR), 3(5), 26-34

Kebewar, M. (2014). The effect of debt on corporate profitability Evidence from French service sector. *ReseachGate*. Retrieve from

https://www.researchgate.net/publication/264235945

- Lunkam, P. (2021, February 24). Industry Outlook 2021-2023: Hotel Industry. Krungsri Bank: Research by Industry. Retrieve from https://www.krungsri.com/en/research/industry/industryoutlook/Services/Hotels/IO/io-hotel-21
- Mamaro, L. & Legotlo, T. (2020). The Impact of Debt Financing on Financial Performance: Evidence from Retail Firms Listed on the JSE. Journal of Accounting and Management, 10(3), 23-33
- Munawar, A. (2019). The Effect of Liquidity, Leverage and Total Asset Turnover on Profitability; Empirical Study of Manufacturing Companies in Indonesia Stock Exchange 2012-2017. SSRG International Journal of Economics and Management Studies (SSRG-IJEMS), 6(9), 126-131
- Muscettola, M. And Naccarato, F. (2016). The Casual Relationship Between Debt and Profitability: The Case of Italy. *Athens Journal of Business and Economics*, 2(1), 17-32
- Nasurion, S.T.A., Putri, R.F., Muda, I. and Ginting, S. (2018). Positive Account Theory: Theoretical Perspectives on Accounting Policy Choice. *In proceeding*

of the 1st Unimed International Conference on Economics Education and Social Science (UNICEES 2018), 1128-1133

- Ngo, V.T., Tram, T.X. & Vu, B.T. (2020). The Impact of Debt on Corporate Profitability: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business, 7*(11), 835-842
- Raisa, M.L. & Cristian, M.M. (2015). Does Short Term Debt Affect Profitability? Evidence from the Romanian Listed Companies. Annals of the "Constantin Brancusi" University of Targu Jiu, Economy Series, Special Issue ECO-TREND 2015 – Performance, Competitiveness, Creativity, 228-233
- Santosuosso, P. (2014). Cost of Debt and Corporate Profitability. International Business Research, 7(2), 13-21
- Shahniaa, C., Purnamasarib, E.D., Hakimc, L. & Endria, E (2020). Determinant of profitability: Evidence from trading, service and investment companies in Indonesia. Accounting 6 (2020), 787–794
- Somathilake, H. (2020). The Effect of Debt Financing on Corporate Profitability: Special Reference to Manufacturing Companies Listed in Colombo Stock Exchange. International Research Journal of Modernization in Engineering Technology and Science, 2(5), 160-166

The Securities and Exchange Commission, Thailand (2021). *Publication Document -Financial Statements*. Retrieve from

https://market.sec.or.th/public/idisc/th/FinancialReport/ALL

- Warrad, L. (2014). The Effect of Current Ratio on Jordanian Real Estate Sector's Net Profit Margin. European Journal of Economics, Finance and Administrative Sciences, 16, 35-39
- Warrad, L. & Omari, R.A. (2015). The Impact of Turnover Ratios on Jordanian Services Sectors' Performance. Journal of Modern Accounting and Auditing, 11(2), 77-85





APPENDIX 1

Raw Data

1. Raw Data of Asia Hotel During 2000-2020

Selected Data from Statement of Financial Position of Asia Hotel

Year	Current Assets	Non-Current Asset	Total Asset
2000	130,648,053	6,169,852,601	6,300,500,654
2001	108,391,670	4,130,788,486	4,239,180,156
2002	120,536,427	4,028,687,865	4,149,224,292
2003	157,666,056	3,880,679,239	4,038,345,295
2004	160,731,655	3,767,685,089	3,928,416,744
2005	238,856,758	4,066,896,758	4,305,753,516
2006	220,683,144	3,991,664,925	4,212,348,069
2007	327,602,298	4,260,611,102	4,588,213,400
2008	218,893,915	4,238,668,722	4,457,562,637
2009	213,221,679	4,363,183,745	4,576,405,424
2010	193,004,688	7,585,415,174	7,778,419,861
2011	146,862,856	8,529,466,433	8,676,329,289
2012	217,417,736	9,375,328,290	9,592,746,026
2013	266,492,370	7,586,919,641	7,853,412,011
2014	287,916,142	8,171,241,760	8,459,157,902
2015	249,511,432	8,864,209,977	9,113,721,409
2016	228,151,878	8,930,045,188	9,158,197,066
2017	393,166,192	8,906,680,081	9,299,846,273
2018	210,635,586	9,465,604,542	9,676,240,128
2019	214,970,819	9,257,241,927	9,472,212,746
2020	284,009,343	9,285,264,185	9,569,273,528

V	Current	Non-Current		Owner's
rear	Liabilities	Liabilities	Total Liabilities	Equities
2000	1,057,030,000	4,191,591,773	5,248,621,774	1,051,878,880
2001	1,156,205,222	4,201,853,416	5,358,058,638	-1,118,878,483
2002	968,009,969	4,329,249,450	5,297,259,419	-1,148,035,127
2003	864,112,074	4,296,115,245	5,160,227,319	-1,121,882,024
2004	1,092,670,314	4,007,459,520	5,100,129,833	-1,171,713,090
2005	328,853,084	3,135,564,697	3,464,417,781	841,335,735
2006	283,924,342	2,944,966,054	3,228,890,396	983,457,673
2007	350,482,756	2,749,105,784	3,099,588,540	1,488,624,859
2008	206,971,407	1,783,955,784	1,990,927,191	2,466,635,446
2009	255,802,420	1,720,267,589	1,976,070,009	2,600,335,415
2010	279,379,276	2,076,148,153	2,355,527,429	5,422,892,432
2011	380,915,202	2,190,303,034	2,571,218,236	6,105,111,053
2012	430,629,520	3,441,871,737	3,872,501,257	5,720,244,769
2013	366,780,523	2,828,554,218	3,195,334,741	4,658,077,270
2014	471,433,066	3,269,445,044	3,740,878,110	4,718,279,792
2015	419,713,445	3,218,695,334	3,638,408,779	5,475,312,630
2016	515,045,933	3,109,912,045	3,624,957,978	5,533,239,088
2017	585,864,425	3,032,112,083	3,617,976,508	5,681,869,765
2018	524,943,638	3,555,944,320	4,080,887,958	5,595,352,170
2019	649,194,299	3,351,962,185	4,001,156,484	5,471,056,262
2020	596,138,623	3,632,744,770	4,228,883,393	5,340,390,135

Selected Data from Statement of Financial Position of Asia Hotel

Voor	Salas	Other	Interest	Not Drofit	Total
1 cai	Sales	Income	Expense		Revenue
2000	440,808,207	175,634,800	271,381,852	-523,144,582	616,443,007
2001	626,283,697	56,304,167	267,673,221	-1,900,341,419	682,587,864
2002	677,091,145	60,228,584	220,152,525	-29,556,643	737,319,729
2003	713,878,540	46,848,950	230,806,635	27,218,712	760,727,490
2004	832,887,338	58,822,400	208,972,984	-49,831,066	891,709,738
2005	951,334,325	98,899,241	151,582,494	1,600,505,018	1,050,233,566
2006	1,059,530,052	79,654,412	143,927,176	159,050,416	1,139,184,465
2007	1,078,502,363	58,915,393	126,026,734	-44,681,298	1,137,417,756
2008	1,077,931,931	954,218,419	105,228,023	1,058,861,587	2,032,150,350
2009	888,429,894	162,616,050	81,909,196	161,476,560	1,051,045,944
2010	929,111,656	263,228,895	95,673,651	346,514,405	1,192,340,551
2011	903,033,211	88,919,431	121,483,466	69,464,582	991,952,642
2012	1,154,689,981	97,569,969	125,124,443	166,368,158	1,252,259,950
2013	1,316,224,921	62,013,848	119,388,060	136,634,637	1,378,238,769
2014	1,211,254,360	114,867,461	105,769,840	211,886,598	1,326,121,821
2015	1,364,717,708	88,692,802	113,258,779	295,268,805	1,453,410,510
2016	1,281,695,585	82,735,439	113,338,280	6,158,368	1,364,431,024
2017	1,320,407,063	260,377,048	113,563,840	161,579,565	1,580,784,111
2018	1,336,070,498	85,272,477	105,062,108	2,669,541	1,421,342,975
2019	1,356,126,410	83,658,475	123,513,299	-55,589,565	1,439,784,885
2020	810,538,345	82,592,736	124,319,913	-122,295,114	893,131,081

Selected Data from Statement of Financial Position of Asia Hotel

Year	Current Assets	Non-Current Asset	Total Asset
2000	129,603,729	4,844,135,386	4,973,739,115
2001	498,599,910	4,816,189,864	5,314,789,774
2002	536,055,463	4,669,781,208	5,205,836,671
2003	505,654,581	5,446,878,104	5,952,532,685
2004	616,377,165	5,644,412,727	6,260,789,892
2005	791,431,487	7,254,544,461	8,045,975,948
2006	866,374,718	9,626,746,646	10,493,121,364
2007	1,001,867,169	10,788,835,782	11,790,702,951
2008	1,413,867,604	16,250,585,681	17,664,453,285
2009	1,424,952,417	18,392,037,273	19,816,989,690
2010	1,625,029,520	19,062,773,462	20,687,802,982
2011	1,762,736,285	19,920,851,039	21,683,587,324
2012	1,989,029,810	25,768,152,437	27,757,182,247
2013	2,463,454,779	26,760,902,483	29,224,357,262
2014	2,473,318,309	26,235,554,905	28,708,873,214
2015	2,335,403,468	22,108,095,295	24,443,498,763
2016	3,042,735,261	21,354,073,017	24,396,808,278
2017	2,650,522,430	22,386,787,223	25,037,309,653
2018	4,049,273,454	22,398,176,354	26,447,449,808
2019	4,661,220,497	22,928,380,081	27,589,600,578
2020	4,405,788,172	30,944,354,745	35,350,142,917

2. Raw Data of Central Plaza Hotel During 2000-2020

Selected Data from Statement of Financial Position of Central Plaza Hotel

Voor	Current Non-Current		Total Lighting	Owner's
rear	Liabilities	Liabilities	Total Liabilities	Equities
2000	338,776,309	2,007,066,165	2,345,842,474	2,627,896,641
2001	1,071,432,959	1,557,057,311	2,628,490,270	2,686,299,504
2002	980,704,626	1,519,446,264	2,500,150,890	2,705,685,781
2003	1,283,008,745	1,886,110,634	3,169,119,379	2,783,413,306
2004	1,060,817,472	1,766,574,598	2,827,392,070	3,433,397,822
2005	1,792,792,694	2,750,219,852	4,543,012,546	3,502,963,402
2006	3,339,633,184	2,819,843,162	6,159,476,346	4,333,645,018
2007	2,780,632,657	4,591,334,983	7,371,967,640	4,418,735,311
2008	7,234,146,507	4,000,508,559	11,234,655,066	6,429,798,219
2009	4,216,620,766	9,323,811,708	13,540,432,474	6,276,557,216
2010	5,221,995,759	9,384,656,185	14,606,651,944	6,081,151,038
2011	6,522,741,772	9,112,206,045	15,634,947,817	6,048,639,507
2012	7,843,235,593	9,855,124,100	17,698,359,693	10,058,822,554
2013	6,418,302,589	11,588,253,593	18,006,556,182	11,217,801,080
2014	5,344,498,088	11,648,222,239	16,992,720,327	11,716,152,887
2015	7,643,653,542	6,879,092,685	14,522,746,227	9,920,752,536
2016	4,639,270,701	8,640,257,546	13,279,528,247	11,117,280,031
2017	4,404,771,149	8,574,168,380	12,978,939,529	12,058,370,124
2018	3,692,265,377	9,335,509,416	13,027,774,793	13,419,675,015
2019	5,129,197,789	8,316,780,238	13,445,978,027	14,143,622,551
2020	7,797,864,256	17,336,721,819	25,134,586,075	10,215,556,842

Selected Data from Statement of Financial Position of Central Plaza Hotel

Veer	Salar	Other	Interest	Not Droff4	Total Dovomus
rear	Sales	Income	Expense	Net Prom	I otal Kevenue
2000	3,297,632,146	281,339,846	111,387,354	153,630,717	3,578,971,992
2001	3,976,008,832	300,234,337	111,358,474	255,094,078	4,276,243,169
2002	4,174,301,036	311,966,139	90,451,440	222,692,673	4,486,267,175
2003	4,189,824,620	326,548,482	14,939,219	279,235,909	4,516,373,102
2004	5,126,942,314	372,935,281	12,695,750	541,120,637	5,499,877,595
2005	5,837,436,857	401,683,554	24,686,005	535,954,035	6,239,120,411
2006	6,350,672,240	531,580,674	132,787,212	417,197,641	6,882,252,914
2007	6,701,211,486	480,774,726	94,039,582	450,892,085	7,181,986,212
2008	7,604,435,448	602,208,883	59,518,378	375,357,627	8,206,644,331
2009	7,860,453,993	675,954,816	206,115,317	98,885,090	8,536,408,809
2010	8,741,414,125	758,825,052	307,526,066	-9,749,207	9,500,239,177
2011	11,277,807,168	296,422,671	414,072,559	590,488,008	11,574,229,839
2012	14,503,834,080	876,567,869	486,342,148	1,623,706,397	15,380,401,949
2013	17,095,970,112	461,380,903	506,575,636	1,400,332,313	17,557,351,015
2014	17,992,269,069	494,001,891	455,314,247	1,297,373,780	18,486,270,960
2015	18,822,742,525	468,636,108	379,549,371	1,751,660,425	19,291,378,633
2016	19,448,167,809	458,060,899	298,537,239	1,956,121,534	19,906,228,708
2017	19,814,429,461	530,907,928	223,877,715	2,091,400,394	20,345,337,389
2018	21,262,983,924	505,169,979	204,614,887	2,274,289,100	21,768,153,903
2019	20,622,745,036	668,303,831	214,021,422	1,809,172,067	21,291,048,867
2020	12,892,743,095	356,704,898	668,739,647	-2,897,651,951	13,249,447,993

Selected Data from Statement of Financial Position of Central Plaza Hotel

Year	Current Assets	Non-Current Asset	Total Asset		
2000	1,217,187,580	2,883,479,764	4,100,667,344		
2001	1,631,507,438	2,480,603,620	4,112,111,058		
2002	1,948,656,170	2,410,209,234	4,358,865,404		
2003	1,227,687,113	3,194,648,732	4,422,335,845		
2004	738,625,105	3,917,390,411	4,656,015,516		
2005	810,268,001	4,821,716,611	5,631,984,612		
2006	1,233,046,168	5,105,513,060	6,338,559,228		
2007	1,006,942,443	5,508,276,012	6,515,218,455		
2008	837,524,204	5,102,671,281	5,940,195,485		
2009	939,729,401	4,667,318,830	5,607,048,231		
2010	1,029,305,017	5,066,175,657	6,095,480,674		
2011	1,363,558,512	6,977,784,279	8,341,342,791		
2012	1,297,109,741	7,104,962,027	8,402,071,768		
2013	1,717,723,053	7,553,162,932	9,270,885,985		
2014	1,767,700,238	7,297,427,707	9,065,127,945		
2015	1,817,061,130	7,571,414,939	9,388,476,069		
2016	1,912,942,979	7,120,034,032	9,032,977,011		
2017	2,278,451,787	7,701,414,482	9,979,866,269		
2018	2,616,952,147	8,956,093,464	11,573,045,611		
2019	5,287,951,776	8,949,122,024	14,237,073,800		
2020	2,537,607,287	19,322,994,124	21,860,601,411		

3. Raw Data of Dusit Thani During 2000-2020

Selected Data from Statement of Financial Position of Dusit Thani

Veen	Current	Non-Current		Owner's
rear	Liabilities	Liabilities	Total Liabilities	Equities
2000	988,560,065	263,406,980	1,251,967,045	2,848,700,299
2001	944,583,886	52,000,000	996,583,886	3,115,527,172
2002	1,020,589,688	0	1,020,589,688	3,338,275,716
2003	1,118,027,820	0	1,118,027,820	3,304,308,025
2004	607,593,891	303,000,000	910,593,891	3,745,421,625
2005	604,083,233	1,175,345,754	1,779,428,987	3,852,555,625
2006	940,053,531	1,293,721,653	2,233,775,184	4,104,784,044
2007	1,080,715,315	1,320,765,507	2,401,480,822	4,113,737,633
2008	1,079,760,454	724,894,958	1,804,655,412	4,135,540,073
2009	812,034,930	772,822,786	1,584,857,716	4,022,190,515
2010	1,013,638,679	879,357,556	1,892,996,235	4,202,484,439
2011	1,889,868,465	1,878,722,417	3,768,590,882	4,572,751,909
2012	1,745,820,052	2,103,114,213	3,848,934,265	4,553,137,503
2013	2,038,860,124	1,964,152,696	4,003,012,820	5,267,873,165
2014	2,103,161,376	1,749,856,855	3,853,018,231	5,212,109,714
2015	1,912,611,362	2,071,399,298	3,984,010,660	5,404,465,409
2016	1,694,343,399	1,984,544,750	3,678,888,149	5,354,088,862
2017	1,774,069,709	2,325,079,850	4,099,149,559	5,880,716,710
2018	1,934,645,731	3,560,265,423	5,494,911,154	6,078,134,457
2019	3,749,219,980	4,583,355,724	8,332,575,704	5,904,498,096
2020	5,339,235,278	12,361,492,457	17,700,727,735	4,159,873,676

Selected Data from Statement of Financial Position of Dusit Thani

Voor	Salas	Other	Interest	Not Profit	Total
1 cai	Sales	Income	Expense		Revenue
2000	2,279,248,208	213,497,541	119,242,312	423,624,011	2,492,745,749
2001	2,215,250,900	224,996,373	86,935,516	341,430,294	2,440,247,273
2002	2,217,765,655	211,573,333	65,845,990	441,354,485	2,429,338,988
2003	2,041,421,990	212,264,616	65,121,678	314,387,264	2,253,686,606
2004	2,341,028,426	234,096,611	50,148,275	565,839,373	2,575,125,037
2005	2,575,357,413	250,245,120	19,735,075	245,111,940	2,825,602,533
2006	2,848,724,023	374,709,412	81,615,578	221,216,585	3,223,433,435
2007	3,026,373,973	280,685,025	87,529,776	132,312,331	3,307,058,998
2008	3,197,118,127	286,120,960	72,199,591	227,400,850	3,483,239,087
2009	2,777,382,413	271,922,399	51,769,641	-114,582,433	3,049,304,812
2010	2,797,305,140	257,178,386	46,360,818	135,625,172	3,054,483,526
2011	3,492,412,640	278,788,487	20,044,946	7,072,915	3,771,201,127
2012	4,257,442,247	283,106,342	79,033,107	36,821,045	4,540,548,589
2013	5,012,960,958	331,122,906	70,932,599	197,625,470	5,344,083,864
2014	4,789,448,401	435,699,477	64,459,175	13,249,804	5,225,147,878
2015	4,895,149,503	424,258,344	49,395,223	253,100,856	5,319,407,847
2016	4,974,351,891	427,767,456	72,826,354	152,914,958	5,402,119,347
2017	4,722,927,422	503,970,838	58,797,616	332,369,289	5,226,898,260
2018	4,632,681,608	500,499,161	64,764,327	350,255,760	5,133,180,769
2019	4,192,697,700	1,102,383,952	117,523,704	605,518,874	5,295,081,652
2020	2,272,093,469	843,591,402	420,982,543	-1,050,432,447	3,115,684,871

Selected Data from Statement of Financial Position of Dusit Thani

Year	Current Assets	Non-Current Asset	Total Asset
2000	957,329,420	9,687,314,111	10,644,643,531
2001	898,114,943	9,301,261,116	10,199,376,059
2002	618,387,253	7,949,706,900	8,568,094,153
2003	567,016,961	7,627,068,069	8,194,085,030
2004	417,294,406	8,082,473,881	8,499,768,287
2005	494,010,263	7,086,837,579	7,580,847,842
2006	536,362,324	8,184,403,483	8,720,765,807
2007	751,481,531	9,503,867,797	10,255,349,328
2008	908,796,222	11,721,301,761	12,630,097,983
2009	825,766,421	12,463,050,413	13,288,816,834
2010	602,161,904	12,348,265,521	12,950,427,425
2011	771,312,887	11,466,552,402	12,237,865,289
2012	818,737,284	12,015,315,516	12,834,052,800
2013	1,227,026,741	12,488,274,762	13,715,301,503
2014	1,046,696,690	13,469,919,837	14,516,616,527
2015	1,408,618,255	13,411,428,554	14,820,046,809
2016	1,278,161,137	13,632,953,965	14,911,115,102
2017	1,572,670,744	14,475,024,298	16,047,695,042
2018	1,559,941,381	15,388,751,063	16,948,692,444
2019	1,456,325,922	16,377,935,998	17,834,261,920
2020	1,962,203,692	19,252,512,726	21,214,716,418

4. Raw Data of The Erawan Group During 2000-2020

Selected Data from Statement of Financial Position of The Erawan Group

Voor	Current Non-Current		Total Liabilitias	Owner's
1 cai	Liabilities	Liabilities	I otal Liabilities	Equities
2000	374,826,022	6,576,417,326	6,951,243,348	3,693,400,183
2001	1,108,948,514	5,827,612,744	6,936,561,258	3,262,814,801
2002	1,285,302,566	3,792,121,198	5,077,423,764	3,490,670,389
2003	958,327,902	3,345,695,099	4,304,023,001	3,890,062,029
2004	1,413,941,639	3,087,265,965	4,501,207,604	3,998,560,683
2005	1,980,123,197	3,590,963,023	5,571,086,220	2,009,761,622
2006	1,220,925,646	4,593,363,014	5,814,288,660	2,906,477,147
2007	3,410,971,211	3,093,844,291	6,504,815,502	3,750,533,826
2008	2,226,415,154	6,645,269,524	8,871,684,678	3,758,413,305
2009	1,602,235,563	8,147,622,064	9,749,857,627	3,538,959,207
2010	1,371,340,640	8,306,136,793	9,677,477,433	3,272,949,991
2011	1,445,288,111	7,023,102,124	8,468,390,235	3,769,475,054
2012	2,020,379,768	7,099,511,758	9,119,891,526	3,714,161,274
2013	2,116,042,324	6,370,362,661	8,486,404,985	5,228,896,518
2014	2,716,235,709	7,066,434,775	9,782,670,484	4,733,946,043
2015	3,592,582,383	6,345,001,700	9,937,584,083	4,882,462,726
2016	3,606,100,824	6,232,460,089	9,838,560,913	5,072,554,189
2017	3,217,809,787	7,426,853,098	10,644,662,885	5,403,032,157
2018	3,539,827,672	7,700,438,456	11,240,266,128	5,708,426,316
2019	3,360,306,270	8,532,661,236	11,892,967,506	5,941,294,414
2020	2,812,343,657	14,473,814,179	17,286,157,836	3,928,558,582

Selected Data from Statement of Financial Position of The Erawan Group

Voor	Salas	Other	Interest	Not Profit	Total
I cai	Sales	Income	Expense		Revenue
2000	2,485,428,284	52,952,621	470,932,803	19,557,791	2,538,380,905
2001	2,803,060,217	82,693,680	341,491,665	-242,319,117	2,885,753,897
2002	3,008,669,630	75,860,964	249,578,191	116,550,379	3,084,530,594
2003	2,468,151,375	124,249,955	138,565,286	315,508,469	2,592,401,330
2004	2,488,104,413	51,769,038	114,147,824	339,198,017	2,539,873,451
2005	2,858,278,277	42,923,138	154,241,197	314,004,021	2,901,201,415
2006	3,330,922,097	54,042,336	222,682,555	478,630,962	3,384,964,433
2007	3,194,350,026	197,047,329	221,318,189	464,282,446	3,391,397,355
2008	3,375,977,058	36,983,268	273,872,602	139,580,027	3,412,960,326
2009	3,149,033,071	42,589,981	306,846,197	-197,291,982	3,191,623,052
2010	3,321,247,579	43,080,677	360,761,571	-259,303,698	3,364,328,256
2011	3,755,543,843	731,687,896	406,682,214	530,214,936	4,487,231,739
2012	4,302,248,101	61,511,628	393,292,080	166,764,307	4,363,759,729
2013	4,702,359,465	894,597,866	368,139,864	966,391,697	5,596,957,331
2014	4,284,512,637	69,576,181	359,865,405	-110,459,387	4,354,088,818
2015	5,254,917,620	45,756,305	386,831,736	230,316,512	5,300,673,925
2016	5,624,173,311	39,775,864	362,081,245	407,736,026	5,663,949,175
2017	5,995,626,958	54,828,984	343,671,564	565,016,820	6,050,455,942
2018	6,260,170,592	47,505,100	360,336,075	593,186,373	6,307,675,692
2019	6,379,074,589	59,998,095	401,639,622	502,750,230	6,439,072,684
2020	2,306,009,584	42,451,982	536,117,916	-1,778,582,519	2,348,461,566

Selected Data from Statement of Financial Position of The Erawan Group

Year	Current Assets	Non-Current Asset	Total Asset
2003	96,091,930	3,891,544,028	3,987,635,958
2004	2,083,795,061	4,811,275,754	6,895,070,815
2005	2,820,336,070	5,432,861,738	8,253,197,808
2006	3,542,864,485	6,391,187,635	9,934,052,120
2007	3,264,817,604	5,093,576,099	8,358,393,703
2008	2,041,106,642	5,299,422,762	7,340,529,404
2009	1,747,267,360	5,115,955,572	6,863,222,932
2010	1,618,249,209	5,062,975,731	6,681,224,940
2011	1,652,222,410	4,957,483,390	6,609,705,800
2012	2,093,031,175	4,881,313,359	6,974,344,534
2013	3,615,310,721	4,273,351,293	7,888,662,014
2014	1,676,068,981	3,852,468,052	5,528,537,033
2015	1,935,705,560	3,947,774,450	5,883,480,010
2016	2,689,902,123	4,999,450,424	7,689,352,547
2017	4,332,293,319	4,952,508,784	9,284,802,103
2018	3,945,202,524	9,731,763,311	13,676,965,835
2019	3,444,120,016	11,080,703,184	14,524,823,200
2020	2,735,949,006	10,771,814,937	13,507,763,943

5. Raw Data of Grande Asset Hotels and Property During 2003-2020

Selected Data from Statement of Financial Position of Grande Asset Hotels and Property

Veen	Current	Non-Current	Total Liabilitian	Owner's
rear	Liabilities	Liabilities	Total Liabilities	Equities
2003	313,823,027	2,068,037,597	2,381,860,624	1,605,775,334
2004	1,277,193,745	3,354,158,280	4,631,352,025	2,263,718,790
2005	4,056,973,039	1,700,324,147	5,757,297,186	2,495,900,622
2006	4,007,535,987	2,186,068,755	6,193,604,742	3,740,447,378
2007	2,471,846,878	4,932,953,051	7,404,799,929	953,593,774
2008	1,105,954,534	5,533,539,941	6,639,494,475	701,034,929
2009	1,183,065,578	5,523,372,322	6,706,437,900	156,785,032
2010	3,202,878,130	2,588,198,480	5,791,076,610	890,148,330
2011	1,547,531,719	2,578,122,588	4,125,654,307	2,484,051,493
2012	3,779,215,798	842,625,069	4,621,840,867	2,352,503,667
2013	2,531,264,442	2,927,182,620	5,458,447,062	2,430,214,952
2014	1,363,864,947	1,132,446,443	2,496,311,390	3,032,225,643
2015	1,961,118,681	1,026,098,384	2,987,217,065	2,896,262,945
2016	1,843,000,433	2,944,194,112	4,787,194,545	2,902,158,002
2017	2,584,529,355	3,077,067,140	5,661,596,495	3,623,205,608
2018	2,788,913,128	6,326,451,528	9,115,364,656	4,561,601,179
2019	2,888,164,061	7,476,203,796	10,364,367,857	4,160,455,343
2020	3,891,751,242	6,504,769,844	10,396,521,086	3,111,242,857

Selected Data from Statement of Financial Position of Grande Asset Hotels and Property

Veen	Salar	Other	Interest	Not Drofit	Total
rear	Sales	Income	Expense	Net Prom	Revenue
2003	346,449,468	42,257,293	82,904,797	-26,470,674	388,706,761
2004	861,823,615	32,081,551	97,515,360	130,148,203	893,905,166
2005	1,653,910,089	42,585,609	120,404,882	47,344,188	1,696,495,698
2006	2,540,187,332	63,306,429	127,871,756	-104,044,887	2,603,493,761
2007	801,252,465	58,748,515	221,013,596	-1,015,108,540	860,000,980
2008	1,813,318,583	55,703,666	281,160,293	-252,558,845	1,869,022,249
2009	591,419,990	41,299,964	398,103,699	-544,249,897	632,719,954
2010	687,110,297	38,864,576	378,047,363	733,363,298	725,974,873
2011	833,006,882	56,160,756	249,068,202	407,016,921	889,167,638
2012	938,207,063	55,516,832	178,821,147	-416,522,592	993,723,895
2013	1,206,936,116	93,097,997	134,828,438	-13,682,563	1,300,034,113
2014	4,868,276,349	59,362,285	169,548,480	602,010,691	4,927,638,634
2015	1,338,909,086	47,159,005	80,436,106	-120,478,764	1,386,068,091
2016	1,399,503,753	54,351,101	79,729,095	5,895,057	1,453,854,854
2017	2,300,316,464	62,044,940	84,100,428	723,050,438	2,362,361,404
2018	3,338,078,453	380,362,267	267,210,698	283,625,291	3,718,440,720
2019	2,973,039,054	168,483,449	497,580,531	-302,176,104	3,141,522,503
2020	999,794,187	144,451,457	546,883,269	-1,041,141,017	1,144,245,644

Selected Data from Statement of Financial Position of Grande Asset Hotels and

Property

X 7			
Year	Current Assets	Non-Current Asset	Total Asset
2000	1,185,959,394	6,911,506,468	8,097,465,862
2001	1,410,690,143	6,589,710,449	8,000,400,592
2002	1,075,528,001	7,422,909,312	8,498,437,313
2003	1,341,918,397	7,376,460,394	8,718,378,791
2004	1,772,951,176	7,737,476,571	9,510,427,747
2005	2,079,331,323	10,538,727,595	12,618,058,918
2006	3,410,689,468	11,497,131,899	14,907,821,367
2007	4,743,665,191	20,270,172,995	25,013,838,186
2008	3,506,793,309	21,432,462,316	24,939,255,625
2009	3,474,570,557	18,276,186,920	21,750,757,477
2010	5,562,882,111	16,480,239,664	22,043,121,775
2011	3,930,561,341	15,333,936,477	19,264,497,818
2012	3,808,151,386	15,596,772,648	19,404,924,034
2013	4,702,981,118	13,344,517,197	18,047,498,315
2014	5,180,350,985	13,533,747,293	18,714,098,278
2015	5,699,388,541	14,391,883,249	20,091,271,790
2016	5,166,100,610	15,559,247,645	20,725,348,255
2017	5,965,012,094	14,918,695,653	20,883,707,747
2018	5,439,954,077	15,392,357,523	20,832,311,600
2019	6,015,027,145	17,511,289,902	23,526,317,047
2020	5,849,456,567	17,021,726,331	22,871,182,898

6. Raw Data of Laguna Resorts & Hotels During 2000-2020

Selected Data from Statement of Financial Position of Laguna Resorts &

Hotels

Voor	Current	Non-Current	Total Linkilitian	Owner's
rear	Liabilities	Liabilities	Total Liabilities	Equities
2000	931,019,250	646,813,270	1,577,832,520	6,519,633,342
2001	1,021,270,193	603,117,727	1,624,387,920	6,376,012,672
2002	1,156,762,017	925,047,621	2,081,809,638	6,416,627,675
2003	1,330,967,792	732,364,087	2,063,331,879	6,655,046,912
2004	1,266,274,578	443,171,285	1,709,445,863	7,800,981,884
2005	2,291,111,953	2,737,838,501	5,028,950,454	7,589,108,464
2006	2,773,515,945	3,552,654,940	6,326,170,885	8,581,650,482
2007	3,535,797,341	2,570,947,861	6,106,745,202	18,907,092,984
2008	2,998,954,294	2,216,000,512	5,214,954,806	19,724,300,819
2009	2,879,595,291	2,048,250,477	4,927,845,768	16,822,911,709
2010	2,447,530,393	2,046,777,813	4,494,308,206	17,548,813,569
2011	2,340,811,002	2,334,593,131	4,675,404,133	14,589,093,685
2012	1,611,476,566	3,118,950,987	4,730,427,553	14,674,496,481
2013	1,882,323,191	4,763,182,578	6,645,505,769	11,401,992,546
2014	3,218,382,311	4,088,084,906	7,306,467,217	11,407,631,061
2015	2,733,382,629	5,682,717,503	8,416,100,132	11,675,171,658
2016	2,524,760,500	5,515,285,421	8,040,045,921	12,685,302,334
2017	3,468,472,292	4,754,557,277	8,223,029,569	12,660,678,178
2018	3,290,756,361	4,868,719,059	8,159,475,420	12,672,836,180
2019	4,448,566,674	6,865,178,913	11,313,745,587	12,212,571,460
2020	4,556,017,208	7,563,052,617	12,119,069,825	10,752,113,073

Selected Data from Statement of Financial Position of Laguna Resorts &

Hotels

Voor	Salas	Other	Interest	Not Drofit	Total
rear	Sales	Income	Expense	INEL FTOIL	Revenue
2000	2,773,423,104	39,005,684	93,747,892	565,718,607	2,812,428,788
2001	2,941,844,057	59,220,862	66,870,961	504,747,079	3,001,064,919
2002	2,835,140,499	33,748,865	78,663,343	229,420,902	2,868,889,364
2003	2,984,652,377	74,484,684	57,169,203	562,483,906	3,059,137,061
2004	3,855,410,495	104,041,243	39,813,346	1,005,210,797	3,959,451,738
2005	3,156,534,933	49,343,840	138,102,723	-22,151,209	3,205,878,773
2006	5,998,388,630	157,263,243	202,055,630	1,134,751,619	6,155,651,873
2007	7,000,336,223	136,845,201	220,658,513	1,366,548,618	7,137,181,424
2008	6,509,245,400	403,072,111	185,805,055	1,172,148,205	6,912,317,511
2009	3,900,713,636	108,059,936	159,036,695	164,339,979	4,008,773,572
2010	3,824,789,236	2,412,635,751	132,210,452	1,463,516,851	6,237,424,987
2011	3,460,572,615	137,448,398	132,157,254	-184,660,236	3,598,021,013
2012	4,149,792,533	149,486,910	179,887,551	58,557,927	4,299,279,443
2013	4,261,417,515	91,017,516	180,457,409	116,638,116	4,352,435,031
2014	3,945,564,636	70,860,919	162,075,264	21,222,897	4,016,425,555
2015	5,543,523,892	114,705,625	166,147,594	176,433,321	5,658,229,517
2016	4,880,276,792	461,380,608	190,195,577	377,788,023	5,341,657,400
2017	4,679,687,766	177,876,349	176,782,230	63,108,422	4,857,564,115
2018	5,378,257,113	101,404,100	158,178,352	75,573,980	5,479,661,213
2019	6,015,604,738	142,215,981	132,252,130	358,205,403	6,157,820,719
2020	2,815,290,024	70,756,783	234,822,190	-968,214,576	2,886,046,807

Selected Data from Statement of Financial Position of Laguna Resorts & Hotels

Year	Current Assets	Non-Current Asset	Total Asset
2000	270,230,834	1,475,442,839	1,745,673,673
2001	223,371,779	1,930,934,413	2,154,306,192
2002	396,974,319	1,832,116,190	2,229,090,509
2003	341,746,173	1,918,100,107	2,259,846,280
2004	396,176,125	1,972,387,068	2,368,563,193
2005	278,612,878	2,379,067,383	2,657,680,261
2006	289,878,381	2,421,011,922	2,710,890,303
2007	705,608,211	2,083,447,363	2,789,055,574
2008	636,953,853	2,072,740,434	2,709,694,287
2009	631,038,021	1,987,723,879	2,618,761,900
2010	195,524,052	2,247,738,702	2,443,262,754
2011	213,085,975	2,087,020,733	2,300,106,708
2012	421,122,701	1,983,976,014	2,405,098,715
2013	412,725,509	1,568,314,065	1,981,039,574
2014	326,458,130	1,491,887,785	1,818,345,915
2015	252,124,463	1,750,672,545	2,002,797,008
2016	314,923,378	1,819,988,874	2,134,912,252
2017	248,117,232	1,641,717,305	1,889,834,537
2018	265,358,823	1,603,012,838	1,868,371,661
2019	296,669,563	2,904,591,205	3,201,260,768
2020	245,525,959	6,496,548,461	6,742,074,420

7. Raw Data of OHTL During 2000-2020

Selected Data from Statement of Financial Position of OHTL

Voor	Current	Non-Current	Total	Owner's
rear	Liabilities	Liabilities	Liabilities	Equities
2000	716,865,206	95,124,818	811,990,024	933,683,649
2001	889,733,429	286,322,597	1,176,056,026	978,250,166
2002	470,262,220	700,471,392	1,170,733,612	1,058,356,897
2003	543,417,610	677,596,999	1,221,014,609	1,038,831,671
2004	962,762,168	90,314,454	1,053,076,622	1,315,486,571
2005	590,209,237	712,772,183	1,302,981,420	1,354,698,841
2006	569,949,525	725,528,149	1,295,477,674	1,415,412,629
2007	917,331,346	443,950,138	1,361,281,484	1,427,774,090
2008	1,188,906,032	164,549,526	1,353,455,558	1,356,238,729
2009	592,554,586	822,194,418	1,414,749,004	1,204,012,896
2010	564,527,237	698,746,494	1,263,273,731	1,179,989,023
2011	440,862,109	723,276,425	1,164,138,534	1,135,968,174
2012	413,174,282	695,427,059	1,108,601,341	1,296,497,374
2013	805,713,318	256,390,407	1,062,103,725	918,935,849
2014	378,653,768	616,379,160	995,032,928	823,312,987
2015	597,900,313	627,979,765	1,225,880,078	776,916,930
2016	694,067,989	703,705,174	1,397,773,163	737,139,089
2017	470,695,807	655,009,654	1,125,705,461	764,129,076
2018	426,295,601	654,239,657	1,080,535,258	787,836,403
2019	848,757,989	2,088,747,105	2,937,505,094	263,755,674
2020	1,184,372,319	3,434,060,769	4,618,433,088	2,123,641,332

Selected Data from Statement of Financial Position of OHTL

Voor	Salas	Other	Interest	Not Drofit	Total
Tear	Sales	Income	Expense	Inet From	Revenue
2000	1,782,566,481	6,552,102	3,759,305	338,636,358	1,789,118,583
2001	1,795,763,373	3,799,213	14,387,954	316,566,517	1,799,562,586
2002	1,901,192,295	3,807,928	51,272,448	320,106,731	1,905,000,223
2003	1,645,740,131	3,071,044	50,441,534	204,474,774	1,648,811,175
2004	1,994,289,997	21,346,603	44,189,550	365,509,499	2,015,636,600
2005	2,061,729,266	23,176,450	34,498,894	365,993,221	2,084,905,716
2006	2,274,499,783	44,540,679	48,133,905	412,713,788	2,319,040,462
2007	2,330,590,363	40,771,214	41,366,585	380,361,461	2,371,361,577
2008	2,336,191,035	35,495,477	33,971,162	328,435,839	2,371,686,512
2009	1,851,130,277	-25,793,568	34,939,506	135,774,167	1,825,336,709
2010	1,814,412,131	-24,525,168	19,998,733	103,998,867	1,789,886,963
2011	1,919,551,750	29,763,607	20,833,452	129,688,938	1,949,315,357
2012	2,243,905,002	34,337,091	21,383,050	307,011,125	2,278,242,093
2013	2,282,136,956	62,581,684	18,412,336	347,530,075	2,344,718,640
2014	1,914,633,548	6,081,422	13,901,089	175,206,538	1,920,714,970
2015	1,918,459,982	4,438,575	11,846,659	166,033,343	1,922,898,557
2016	2,045,006,370	2,959,693	16,206,222	152,665,659	2,047,966,063
2017	2,129,072,320	4,846,954	14,946,973	215,948,787	2,133,919,274
2018	2,205,345,848	3,646,803	8,794,722	259,734,527	2,208,992,651
2019	1,301,172,310	9,721,299	24,861,771	-370,918,113	1,310,893,609
2020	913,661,400	477,115	76,830,171	-480,121,075	914,138,515

Selected Data from Statement of Financial Position of OHTL
Year	Current Assets	Non-Current Asset	Total Asset
2000	563,598,356	804,366,340	1,367,964,696
2001	481,149,306	866,983,769	1,348,133,075
2002	599,367,972	913,541,253	1,512,909,225
2003	366,020,346	962,253,645	1,328,273,991
2004	586,222,656	963,566,552	1,549,789,208
2005	670,158,450	916,194,136	1,586,352,586
2006	731,603,250	917,784,426	1,649,387,676
2007	533,136,680	925,873,719	1,459,010,399
2008	451,006,144	1,209,119,296	1,660,125,440
2009	262,550,277	1,723,182,231	1,985,732,508
2010	171,905,123	1,527,371,187	1,699,276,310
2011	141,666,728	1,291,567,002	1,433,233,730
2012	143,167,978	1,069,486,904	1,212,654,882
2013	113,253,996	1,029,015,583	1,142,269,579
2014	110,925,818	826,123,048	937,048,866
2015	254,789,962	728,926,104	983,716,066
2016	426,255,594	657,838,386	1,084,093,980
2017	565,535,576	577,331,036	1,142,866,612
2018	667,552,820	498,703,036	1,166,255,856
2019	767,113,817	455,646,610	1,222,760,427
2020	341,353,961	574,186,463	915,540,424

8. Raw Data of Royal Orchid Hotel (Thailand) During 2000-2020

Selected Data from Statement of Financial Position of Royal Orchid Hotel

(Thailand)

Veen	Current	Non-Current	Total	Owner's
Tear	Liabilities	Liabilities	Liabilities	Equities
2000	150,687,084	1,601,256	152,288,340	1,215,676,356
2001	144,145,370	4,329,632	148,475,002	1,199,658,073
2002	250,071,037	3,955,804	254,026,841	1,258,882,384
2003	150,207,219	0	150,207,219	1,178,066,772
2004	212,843,623	0	212,843,623	1,336,945,585
2005	201,195,954	0	201,195,954	1,385,156,632
2006	194,273,353	0	194,273,353	1,455,114,323
2007	161,337,835	0	161,337,835	1,297,672,564
2008	162,055,652	0	162,055,652	1,498,069,788
2009	478,160,538	228,069,644	706,230,182	1,279,502,326
2010	512,199,917	140,466,540	652,666,457	1,046,609,853
2011	517,432,015	49,911,279	567,343,294	865,890,436
2012	372,634,274	28,590,637	401,224,911	811,429,971
2013	231,184,818	29,235,949	260,420,767	881,848,812
2014	209,095,920	46,469,050	255,564,970	681,483,896
2015	169,563,056	49,408,965	218,972,021	764,744,045
2016	166,576,269	50,820,803	217,397,072	866,696,908
2017	176,402,722	58,378,384	234,781,106	908,085,506
2018	167,649,963	58,917,575	226,567,538	939,688,318
2019	188,145,407	80,044,110	268,189,517	954,570,910
2020	98,933,180	153,354,304	252,287,484	663,252,940

Selected Data from Statement of Financial Position of Royal Orchid Hotel

(Thailand)

Voor	Salas	Other Interest		Not Drofit	Total
1 cai	Sales	Income	Expense		Revenue
2000	783,562,754	11,305,653		164,238,015	794,868,407
2001	829,871,780	5,781,168	6,598	143,356,717	835,652,948
2002	926,524,317	5,233,437	0	188,599,311	931,757,754
2003	721,600,420	4,676,398	0	88,871,888	726,276,818
2004	1,085,186,094	4,065,772	0	239,503,813	1,089,251,866
2005	1,136,918,698	8,751,610	0	263,836,047	1,145,670,308
2006	1,214,675,967	22,460,286	0	307,145,191	1,237,136,253
2007	1,133,793,512	19,304,537	0	238,167,241	1,153,098,049
2008	1,078,355,297	12,463,613	0	213,520,824	1,090,818,910
2009	598,488,535	2,603,199	413,862	-114,819,673	601,091,734
2010	600,319,966	928,500	17,120,458	-232,892,473	601,248,466
2011	681,061,746	1,385,434	19,490,335	-180,719,417	682,447,180
2012	846,305,001	965,202	14,585,983	-54,445,921	847,270,203
2013	891,639,887	864,941	6,539,651	-14,216,041	892,504,828
2014	665,892,701	660,559	3,430,163	-144,120,916	666,553,260
2015	850,559,880	1,300,925	549,523	83,260,149	851,860,805
2016	863,661,206	3,634,212	150,867	106,363,880	867,295,418
2017	893,745,060	5,550,707	43,185	127,342,271	899,295,767
2018	936,696,324	6,824,074	0	141,747,504	943,520,398
2019	977,948,441	8,574,915	28,380	147,363,378	986,523,356
2020	240,849,603	4,666,544	8,143,041	-154,654,155	245,516,147

Selected Data from Statement of Financial Position of Royal Orchid Hotel (Thailand)

			8
Year	Current Assets	Non-Current Asset	Total Asset
2000	1,055,653,854	3,962,173,562	5,017,827,416
2001	704,473,595	3,560,180,037	4,264,653,632
2002	728,304,947	4,024,042,495	4,752,347,442
2003	837,389,461	4,045,415,620	4,882,805,081
2004	1,196,278,025	4,143,306,837	5,339,584,862
2005	1,654,084,687	4,223,837,980	5,877,922,667
2006	1,793,752,647	4,674,026,087	6,467,778,734
2007	1,113,348,098	5,943,437,085	7,056,785,183
2008	868,227,286	5,158,270,668	6,026,497,954
2009	848,060,229	5,735,466,665	6,583,526,894
2010	473,847,544	6,120,654,653	6,594,502,197
2011	594,268,250	5,358,869,928	5,953,138,178
2012	1,067,604,975	4,943,323,316	6,010,928,291
2013	2,237,514,724	5,104,812,530	7,342,327,254
2014	2,914,023,294	4,773,786,467	7,687,809,761
2015	3,605,869,273	4,802,893,816	8,408,763,089
2016	3,675,761,932	4,973,980,247	8,649,742,179
2017	3,675,761,932	4,973,980,247	8,649,742,179
2018	4,328,634,125	4,927,687,934	9,256,322,059
2019	3,350,002,437	5,926,761,591	9,276,764,028
2020	2,380,025,297	5,298,647,766	7,678,673,063

9. Raw Data of Shangri-La Hotel During 2000-2020

Selected Data from Statement of Financial Position of Shangri-La Hotel

Voon	Current	Non-Current	Total Lightling	Owner's	
Tear	Liabilities	Liabilities	Total Liabilities	Equities	
2000	388,243,715	15,114,710	403,358,425	4,614,468,991	
2001	344,366,750	10,753,046	355,119,796	3,909,533,836	
2002	516,723,200	76,870,197	593,593,397	4,158,754,045	
2003	482,972,198	78,967,436	561,939,634	4,320,865,447	
2004	391,765,527	80,795,001	472,560,528	4,867,024,334	
2005	441,944,056	80,898,786	522,842,842	5,355,079,825	
2006	626,733,493	81,895,560	708,629,053	5,759,149,681	
2007	859,309,267	83,068,604	942,377,871	6,114,407,312	
2008	474,946,720	81,220,687	556,167,407	5,470,330,547	
2009	887,262,146	279,063,215	1,166,325,361	5,417,201,533	
2010	1,039,408,448	209,811,447	1,249,219,895	5,345,282,302	
2011	1,045,714,125	179,096,075	1,224,810,200	4,728,327,978	
2012	1,129,641,951	52,314,023	1,181,955,974	4,828,972,317	
2013	493,287,600	68,735,974	562,023,574	6,780,303,680	
2014	421,979,624	72,039,248	494,018,872	7,193,790,889	
2015	519,769,658	77,184,220	596,953,878	7,811,809,211	
2016	488,597,652	81,866,311	570,463,963	8,079,278,216	
2017	488,597,652	81,866,311	570,463,963	8,079,278,216	
2018	570,797,942	88,314,650	659,112,592	8,597,209,467	
2019	523,511,883	111,856,998	635,368,881	8,641,395,147	
2020	188,920,220	108,747,039	297,667,259	7,381,005,804	

Selected Data from Statement of Financial Position of Shangri-La Hotel

Veen	Salaa	Other	Interest	Not Drofit	Total
rear	Sales	Income	Expense	INEL FTOIL	Revenue
2000	1,555,852,601	77,006,126	6,897,513	117,845,860	1,632,858,727
2001	1,425,421,658	58,735,419	89,456	128,802,036	1,484,157,077
2002	1,459,399,398	47,367,690	2,055,769	429,773,612	1,506,767,088
2003	1,371,022,460	51,047,784	3,722,582	234,034,227	1,422,070,244
2004	1,874,061,439	58,216,228	2,371,114	431,627,224	1,932,277,667
2005	1,975,873,744	63,084,555	0	484,548,260	2,038,958,299
2006	2,048,172,831	106,288,413	0	551,652,647	2,154,461,244
2007	2,072,885,078	110,317,970	0	491,147,703	2,183,203,048
2008	1,856,482,949	112,684,709	355,104	306,221,372	1,969,167,658
2009	1,104,054,337	48,121,299	3,578,591	-147,245,709	1,152,175,636
2010	1,263,380,104	55,386,622	24,275,786	-147,828,009	1,318,766,726
2011	1,587,380,520	65,648,752	41,084,390	-225,979,515	1,653,029,272
2012	2,065,387,570	56,376,378	10,361,857	99,858,536	2,121,763,948
2013	2,234,421,997	128,716,754	40,563,498	2,059,247,759	2,363,138,751
2014	1,882,665,641	162,655,615	0	887,103,984	2,045,321,256
2015	2,368,808,423	108,242,631	0	669,532,000	2,477,051,054
2016	2,203,303,753	133,621,533		585,966,587	2,336,925,286
2017	2,203,303,753	174,565,275	0	585,966,587	2,377,869,028
2018	2,398,672,934	138,968,887	0	557,758,367	2,537,641,821
2019	2,503,260,762	131,571,536	0	648,235,022	2,634,832,298
2020	651,656,818	62,248,265	197,573	-981,891,436	713,905,083

Selected Data from Statement of Financial Position of Shangri-La Hotel

APPENDIX 2

Result from STATA Program

1. Multiple Regression Analysis with Dummy Variables on Impact of Total Debt

to Profitability

Source	SS	df	MS		Number of obs	= 177
Model	62494.8181	15 416	6.32121		Prob > F	= 4.31 = 0.0000
Residual	155783.941	161 967	.602118		R-squared	= 0.2863
	+				Adj R-squared	= 0.2198
Total	218278.759	176 124	0.22022		Root MSE	= 31.106
np	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
tdb	6964716	.169177	-4.12	0.000	-1.030564	3623795
cdb	.6094697	1.86632	0.33	0.744	-3.076154	4.295093
cr	-2.323454	2.05855	-1.13	0.261	-6.388696	1.741787
tat	80.25623	25.76036	3.12	0.002	29.38447	131.128
sg	.1093008	.0817926	1.34	0.183	0522238	.2708255
lta	15.29614	10.08057	1.52	0.131	-4.611049	35.20332
h1	-53,56809	21.35161	-2.51	0.013	-95.73342	-11.40276
h2	-40.46296	13.31453	-3.04	0.003	-66.75661	-14.16931
h3	-17.62791	13.46952	-1.31	0.192	-44.22762	8.971804
h4	-12.92533	10.93197	-1.18	0.239	-34.51387	8.663209
h5	-35.44908	14.91129	-2.38	0.019	-64.89603	-6.002139
h6	-35.72694	17.48756	-2.04	0.043	-70.26153	-1.19236
h7	-34.43336	19.04246	-1.81	0.072	-72.03856	3.17185
h8	-23.76051	14.88472	-1.60	0.112	-53.15496	5.633947
t	7580552	.5878165	-1.29	0.199	-1.91888	.4027696
_cons	-308.931	229.9232	-1.34	0.181	-762.9852	145.1232

. reg np tdb cdb cr tat sg lta h1 h2 h3 h4 h5 h6 h7 h8 t

2. Multiple Regression Analysis with Dummy Variables on Impact of Short-

Term and Long-Term Debt to Profitability

Source	SS	df	MS		Number of obs	= 177
Model	62546 7708	16 300	0 17318		P(10, 100)	- 0 0000
Residual	155731 088	160 973	2 32/027		R-squared	- 0.2865
	199791.900	100 973			Adi R-squared	- 0.2005
Total	218278 759	176 12/	10 22022		Root MSE	= 31.198
local	2102/01/99	1/0 12-			NOOC HOL	51.150
np	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
sdb	7733872	.3736684	-2.07	0.040	-1.511346	0354288
ldb	6799988	.1840489	-3.69	0.000	-1.043477	3165203
cdb	.6272086	1.873405	0.33	0.738	-3.072582	4.326999
cr	-2.475251	2.166656	-1.14	0.255	-6.754183	1.80368
tat	80.42105	25.84627	3.11	0.002	29.37721	131.4649
sg	.1096901	.0820514	1.34	0.183	0523533	.2717336
lta	15,26425	10.11128	1.51	0.133	-4.704528	35.23302
h1	-52.24762	22.16427	-2.36	0.020	-96.01988	-8.47537
h2	-39.08126	14.6319	-2.67	0.008	-67.97783	-10.18469
h3	-16.95228	13.8222	-1.23	0.222	-44.24976	10.3452
h4	-11.05763	13.62239	-0.81	0.418	-37.96051	15.84526
h5	-34.29751	15.76411	-2.18	0.031	-65.43008	-3.164937
h6	-34.05698	18.9703	-1.80	0.074	-71.52145	3.407501
h7	-32.81074	20.34915	-1.61	0.109	-72.99831	7.376831
h8	-22.359	16.11414	-1.39	0.167	-54.18284	9.464846
t	7616751	.5897604	-1.29	0.198	-1.926394	.4030436
_cons	-308.3413	230.6163	-1.34	0.183	-763.7857	147.1032

. reg np sdb ldb cdb cr tat sg lta h1 h2 h3 h4 h5 h6 h7 h8 t

BIODATA

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