

**DISCOUNTED CASH FLOW VALUATION OF
HAAD THIP PUBLIC COMPANY LIMITED**



**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
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entitled
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DISCOUNTED CASH FLOW VALUATION OF HAAD THIP PUBLIC COMPANY LIMITED

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ABSTRACT

This thematic paper applies the discounted cash flow valuation method (DCF method) to model the intrinsic value of HaadThip company by forecasting the expected cash flows and using net present value to discount those cash flows, taking the time value of money into consideration. The method involves evaluating the firm value by using a set of assumptions to forecast future events including macro and micro analysis, competition analysis, the company financial analysis, investment, and operational effects, and stock price valuation. HaadThip Public Company Limited (HTC) is a non-alcohol beverage manufacturer in the southern provinces of Thailand. The company has a monopoly right to manufacture and distribute Coca-Cola products in the 14 southern provinces. The purpose of this paper is to estimate HaadThip's company value by predicting the future cash flow and stock value based on referenceable assumptions. Finally, the result from the analysis shows the target price of HaadThip company with the recommendation to "BUY".

KEY WORDS: Soft Drinks/ HTC/ Discounted Cash Flow/ Stock Price Valuation

75 pages

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LIST ABBREVIATIONS

β	Beta risk measure
BOI	Board of Investment
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
COGS	Cost of Goods Sold
COVID-19	Coronavirus disease starting in 2019
D/E	Debt to Equity
DFL	Degree of Financial Leverage
DOL	Degree of Operating Leverage
DTL	Degree of Total Leverage
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings before interest, taxes, depreciation, and Amortization
EPS	Earning per share
FCFF	Free Cash Flow to Firm
HORECA	Hotel, Restaurant, and Catering
HTC	HaadThip Public Company Limited
ICHI	Ichitan Group Public Company Limited
GDP	Gross Domestic Product
NARTD	Non-Alcoholics Ready to Drink
NESDB	National Economic and Social Development Board
R_f	Risk free
R_{HTC}	Return of HaadThip stock
R_m	Market return index
ROA	Return on Asset
ROE	Return on Equity
SAPPE	Sappe Public Company Limited
SET	Stock Exchange of Thailand
SSC	Sermsuk Public Company Limited

LIST ABBREVIATIONS (cont.)

SG&A	Selling, General and Administrative Expense
T	Corporate Income Tax Rate
TIPCO	Tipco Food Public Company Limited
WACC	Weighted Average Cost of Capital



CHAPTER I

INTRODUCTION

HaadThip Public Company Limited (HTC) is a non-alcohol beverage manufacturer in the southern provinces of Thailand. The company has the right to manufacture and distribute Coca-Cola products in the 14 southern provinces. The carbonated drink industry is an oligopoly with few players in the market due to the licensing of the brand and the need for high capital resources for manufacturing (Yongpisanphob, 2019). The company's main competitor is Serm Suk company which produces and distributes Est Cola brands.

The product portfolio of HaadThip is divided into two categories including carbonated beverages such as sugary soft drinks under Coca-Cola trademarks and non-carbonated beverages, where 65% of the revenue contribution in 2019 came from Coke followed by 22% from Fanta. The packages of carbonated and non-carbonated beverages are PET (polyethylene terephthalate) bottles, Cans, Regular Glass Bottle (RBG), and One-Way Glass (OWG). The main revenue contribution by the package is 83% from PET (polyethylene terephthalate) bottles.

HaadThip has a market capitalization of 6.88 Billion, considered as a mid-market capitalization stock. The majority of HaadThip's shares were distributed to Thai investors 72.5% and 27.5% to foreign investors (HaadThip Public Company Limited, 2020), with 30.5% of shares allocated to Rattakul's group.

The company's revenue has been increasing year over year from both carbonated and non-carbonated beverages. In 2019, the revenue improved by 20% with respect to the growth in sale volume from a successful implementation of product price adjustment, the optimization of unit production from an economy of scale. Successful execution of sales promotions and marketing campaigns resulted in 34% growth in gross profit from 2018 to 2019.

The company's operational performance in terms of managing cash reflects a good performance. As the account receivables turnover five years CAGR increased by 27.8% as same as the account payable five years CAGR also increased by 40%. HTC's inventory turnover performance was in an upward trend from 2015 to 2018, then it drastically increased from 7.06 to 13.12 from 2018 to 2019. This means the company improved its sales performance and ability to sell goods quickly as a result of efficient operational management, such as an improvement of supply chain management of integration between the production planning process and sales and marketing management (HaadThip Public Company Limited, 2020).

The forecast earnings of the company are predicted to grow at 3% from 2022 to 2025, under the assumption that the COVID-19 situation will resolve resulting in the foreign tourists returning to the South of Thailand, together with the new sales and promotion campaign.

This paper estimates HTC's share price based on the discounted cash flow (DCF) method with a projection period of 2020 to 2025, and under the assumption that the company will continuously grow at a low rate after that. The target share price from the DCF method is 38.18 Baht per share. The recommendation from the DCF suggests an investor to "BUY" this stock since it is undervalued when compared to the current market price of 36.00 as of November 9, 2020. As the stock is defensive and the company's products are in the food and beverage industry with less volatility than the stock market, we see limited downside risks to our recommendation.

CHAPTER II

BUSINESS DESCRIPTION

2.1 Business Description

2.1.1 Overview

HaadThip Public Company Limited (HTC) is a non-alcohol beverages manufacturer in the southern provinces of Thailand. The company was founded in 1969 under the name “Nakornthip Co., Ltd” and was granted a franchise right from Coca-Cola Company in the U.S.A as an exclusive manufacturer and distributor of Coca-Cola products (HaadThip Public Company Limited, 2020). During 1979, Nakornthip Co., Ltd and Thai Thana Company Limited decided to co-invest under the new company name “HaadThip Public Company Limited” to manufacture and distribute Coca-Cola trademarks’ products. The company has a monopoly right to supply Coca-Cola beverages to 14 provinces include Chumphon, Ranong, Yala, Krabi, Phuket, Phang-nga, Trang, Phatthalung, Surat Thani, Nakhon Si Thammarat, Songkhla, Satun, Pattani, and Narathiwat. The company has a share of 83.9% of the Non-Alcoholic Ready to Drink (NARTD) market in Southern Thailand region (HaadThip Public Company Limited, 2020). The products manufactured by HaadThip Public Company Limited (HTC) are classified into two main groups as carbonated beverages such as Coke, Fanta, and Sprite and non-carbonated beverages such as Minute Maid and NamThip drinking water. The company manufactures and distributes its beverage products from two manufacturing plants in Songkhla, and Surat Thani.

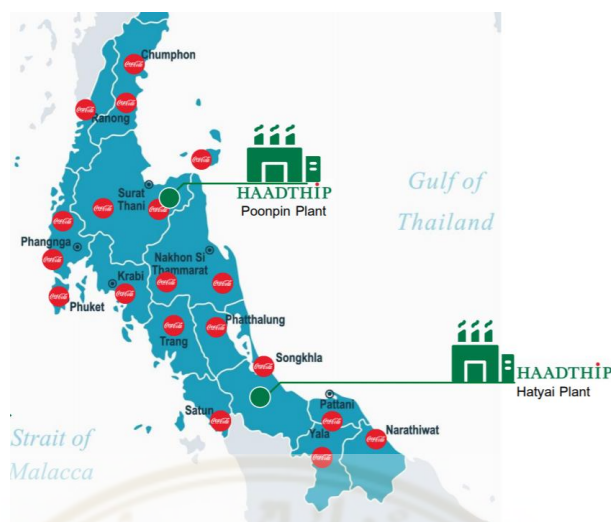


Figure 2.1 HaadThip Distribution Centers & Branches

Source: HaadThip Public Company Limited (2020)

The company purpose, mission statement, and vision statement are as follows:

- Purpose

“Continually increasing profitable, sustainable unit case sales of our products by satisfying new and existing consumers through excellent service to and with our customers at an increasing return” (HaadThip Public Company Limited, 2020).

- Vision

“We are the leader in the beverage industry and committed to sustainable growth with the communities” (HaadThip Public Company Limited, 2020).

- Mission

The company has divided its missions to four perspectives to covered business, brand integrity, sustainability, and people development respectively.

1. “To be a completely integrated beverage company and to maintain the leading position in the southern market, with revenue, sales and profits soaring on a continuous basis” (HaadThip Public Company Limited, 2020).

2. “To continue to be the manufacturer, distributor and service provider of high-quality products to customers and consumers, so that the Company is trusted as part of the South” (HaadThip Public Company Limited, 2020).

3. “To ensure that the Company’s personnel have integrity, perform their duties with loyalty and honesty; and have responsibilities to the organization and society as a whole” (HaadThip Public Company Limited, 2020).

4. “To be an organization with good governance, through the creation and development of the type of personnel that the society needs; and taking part in the development and improvement of natural resources and environment in a responsible and sustainable manner” (HaadThip Public Company Limited, 2020).

2.1.2 Products (or services, or brands)

The product portfolio of HaadThip PCL includes ten brands, 144 SKUs and 34 pack sizes (HaadThip Public Company Limited, 2020) which divided into:

- Carbonated beverages - Coca-Cola, Sprite, Fanta, Schweppes and A&W



Figure 2.2 Carbonated beverages

Source: HaadThip Public Company Limited (2020)

- Non-carbonated beverages (Still beverages) - Bonaqua, Minute Maid, Ayataka tea, Fuzetea, and Namthip Drinking Water.

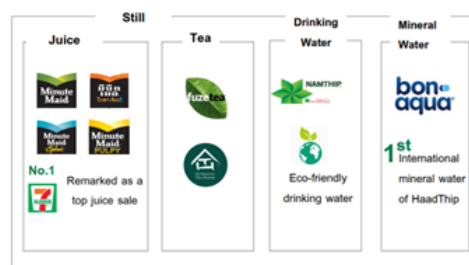


Figure 2.3 Non-carbonated beverages

Source: HaadThip Public Company Limited (2020)

There are four types of packages HaadThip distributed to the market including PET bottles, Cans, Regular Glass Bottle (RBG), and One-Way Glass (OWG) where the highest level of packaging sales is coming from PET bottles.



Figure 2.4 Coca-Cola Packaging

Source: Pacitti (2019)

2.1.3 Manufacturing and Distribution Channels

2.1.3.1 Manufacturing process

According to Coca-Cola.com, the ingredients per one bottle of carbonated beverages including carbonated water, high fructose corn syrup, caramel color, phosphoric acid, natural flavors, and caffeine (Coca-Cola.com, N.D.). As HaadThip is bottling manufacturer, raw materials used in their operations would including water, Coca-Cola concentrates, and packaging (bottles or cans). Some non-carbonated products which it cannot produce the company buys from its partner ThaiNamthip. The manufacturing process of soft drink bottling and canning are involving five major processes where processes that are related to fully automated by machine with minimal human interact within the process (Franson, N.D.).

- Treating water where water need to be cleansed to meet food and safety law.
- Compounding ingredients where the treated water will be mixed with various concentrates and artificial ingredients.
- Carbonating products where the process injected carbon dioxide to make beverages fizzling.
- Filling/Bottling product where automated filling machine will be filling beverages into bottles and cans then adding caps and lids with minimal number of personnel to minimize possibility of contamination.

- Packaging products where the products will be wrapped into cases and deliver to warehouses.



Figure 2.5 Soft drink bottling process

Source: Franson (N.D.)

As the company is the bottling partner with Coca-Cola where the company manufactures and sell beverages syrup-based under Coca-Cola trademarks. The supply chain of HaadThip company involves buying concentrates from Coca-Cola company, syrups and fructose from buying packaging from suppliers, mix syrups with carbonated water, filling into bottles, and distribute to 40,000 outlets all over Southern Thailand (HaadThip Public Company Limited, 2020).

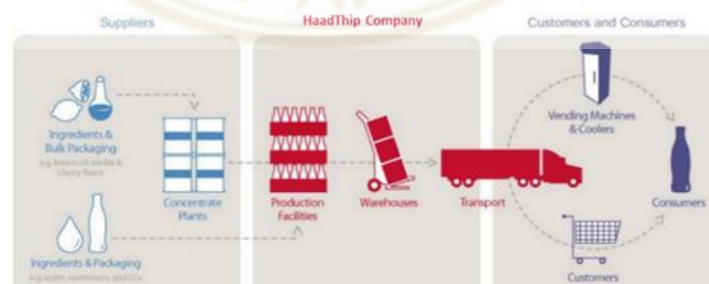


Figure 2.6 Supply Chain of Coca-Cola

Source: Coca-Cola Annual Report (2008)

2.1.3.2 Distribution Channels

HaadThip has a strong relationship within southern communities as the company has a long history and experience within the southern region. The company runs three types of distribution channels including (HaadThip Public Company Limited, 2020):

- Direct Channels
 1. Traditional Trade: Provision shops and Food shops
 2. HORECA (Hotel, Restaurant, and Catering)
- Indirect Channels
 1. Small, Medium and Large Wholesalers
 2. HORECA (Hotel, Restaurant, and Catering)
- Modern Trade
 1. Supermarket and Hypermarket
 2. Convenience stores

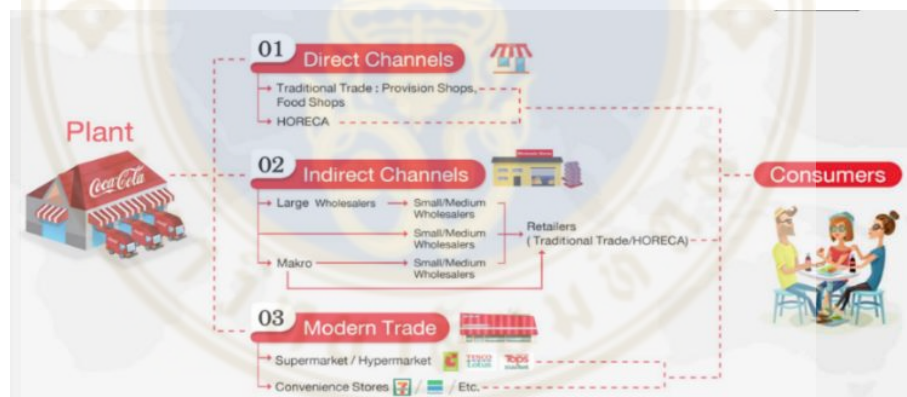


Figure 2.7 Distribution Network

Source: HaadThip Public Company Limited (2020)

2.2 Sources of Revenue and Growth

According to the company annual report for 2017 to 2019, the main source of HaadThip revenue comes from carbonated beverages approximately 94% while 6% of the revenue comes from still beverages as depicted in the figure 8. The company's revenue has been increasing year over year from both carbonated and non-carbonated beverages where in 2019, the revenue improved by 20% from 2018 resulted from prices adjustments in the fourth quarter of 2019, successful implementation from sales promotion and marketing campaign, volume growth driven from hot temperature, and savings from economy of scale (HaadThip Public Company Limited, 2020).

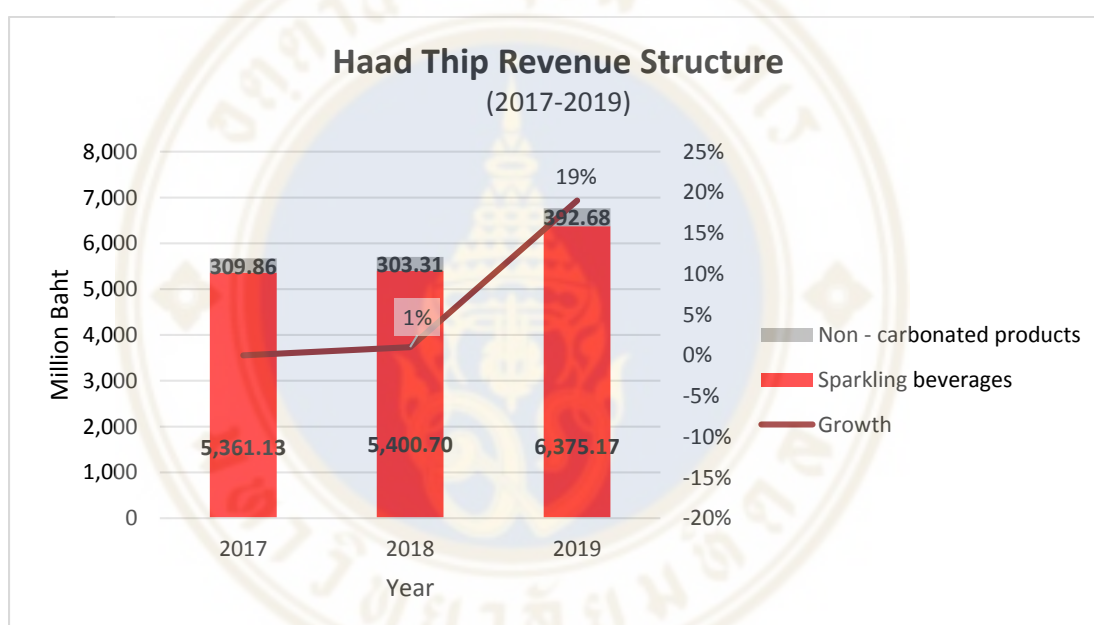


Figure 2.8 Revenue Structure

Source: HaadThip Public Company Limited (2020)

2.2.1 Revenue Contribution by Brand

The sources of the revenue contribution by brand in 2019 came from Coke beverage 65%, Fanta 22%, Sprite 7%, NamThip 3% and Schweppes 1.5% as shown in below figure (HaadThip Public Company Limited, 2020).

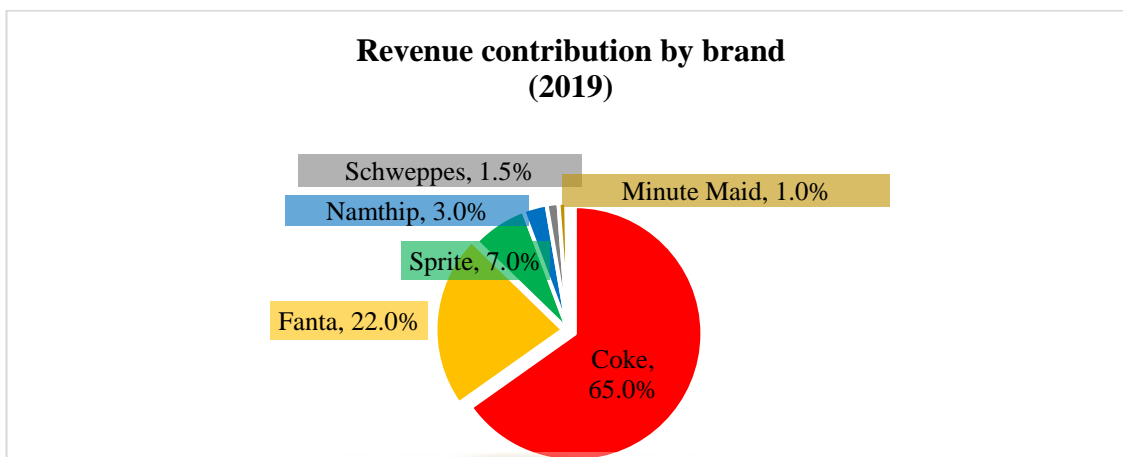


Figure 2.9 Revenue contribution by brand

Source: HaadThip Public Company Limited (2020)

2.2.2 Revenue Contribution by Package

The revenue contribution by package in 2019 came from PET (polyethylene terephthalate) 83%, Can 12%, Regular Glass Bottle (RBG) 2%, and One-Way Glass (OWG) 2% as shown in below figure (HaadThip Public Company Limited, 2020).

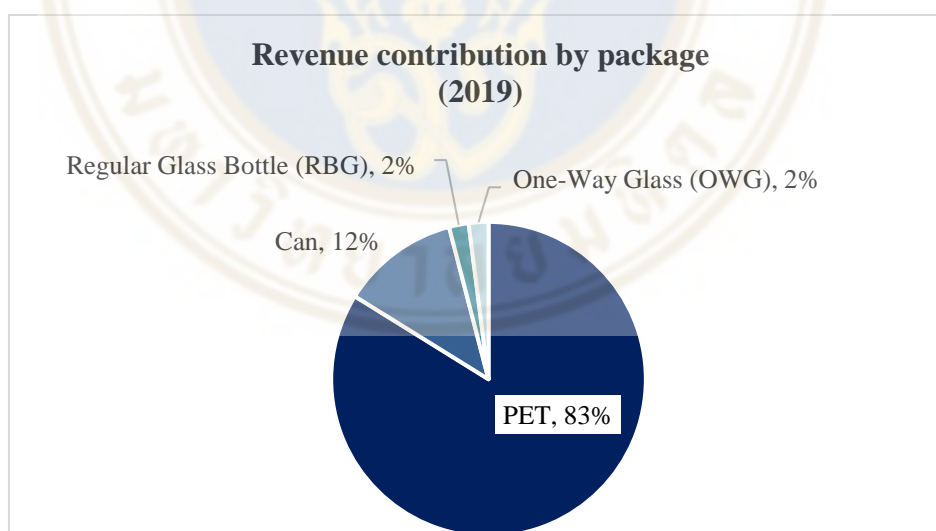


Figure 2.10 Revenue contribution by package

Source: HaadThip Public Company Limited (2020)

2.2.3 Revenue Contribution by Distribution Network

The revenue contribution by distribution network in 2019 came from indirect channels 47% where the company uses intermediary to distribute products to customers such as wholesalers or retailers, direct channels 33% to provision shops, food shops, and HORECA (Hotel, Restaurant, and Catering), modern trade 20% such as supermarket, hypermarket and convenience stores as shown in below figure (HaadThip Public Company Limited, 2020).

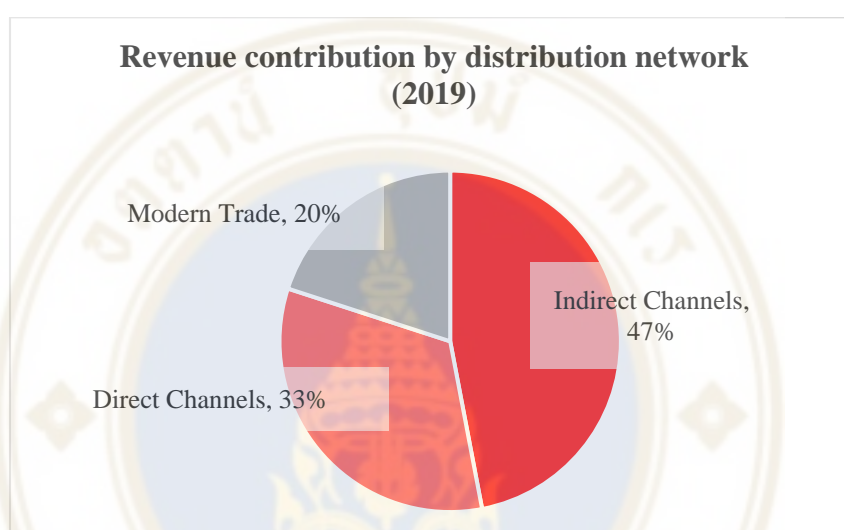


Figure 2.11 Revenue contribution by distribution network

Source: HaadThip Public Company Limited (2020)

2.2.4 Effects of Covid-19 Pandemic on Business

At the end of December 2019, there was a spreading of the new coronavirus which caused COVID-19 illness started in Wuhan, China (Jazeera, 2020). Later on, the disease has been spread worldwide due to its ability to transmit from human to human. With a high number of deaths worldwide, Thailand enacted quarantine for all individuals entering the country and the country went into lock-down during the first quarter of 2020 with an intention to prevent the explosion of the virus (BBC News, 2020). The pandemic created not only human trauma but it also hurt economic costs. All economic activities including manufacturing, distributing, buying, and selling suddenly went into severe shock.

According to the Quarter 2 Management Discussion & Analysis letter, HaadThip reported the global impact of the COVID-19 pandemic decreased HaadThip's beverage consumption by 10% resulted in a reduction of 6.53% in sales compared to the same period in 2019 (HaadThip Public Company Limited, 2020). Since the main distribution of HaadThip Non-Alcoholics Ready to Drink (NARTD) products is HORECA (Hotel, Restaurant, and Catering) in the southern Thailand area, where 39 million foreign tourists visited during 2019 and 25% of those tourists are Chinese so, when the foreign and local government endorsed the quarantine regulation, the area went into sudden economic shock and resulted in decreasing in sales of HaadThip tourism-related distribution channels by 3.5 million unit cases equal to 227.26 million Baht compared to the same period last year 2019 (HaadThip Public Company Limited, 2020).

2.3 The Company Capacities

The company has been granted the Coca-Cola franchise for 14 provinces in Southern Thailand where the area accounted for 15% of Total Thailand population. HaadThip company has 2 manufacturing plants located in Hatyai, Songkhla and Poonpin, Surat Thani comprising of 7 production lines with additional of 3 injection machines. The distribution channels of the company as of 2020 comprising of 19 sales and delivery branches delivered by 200 sales trucks, servicing over 40,000 outlets with 2,000 employees. The company is serving sparkling beverages of 3.6 million servings/day (HaadThip Public Company Limited, 2020).

As the company manufactures 4 types of packages including PET bottles, Cans, Regular Glass Bottle (RBG), and One-Way Glass (OWG) where the highest form of packaging sale is coming from PET bottles following are the bottling process capacity of the company: (HaadThip Public Company Limited, 2020).

Table 2.1 Hatyai Production Capacity

Hatyai, Songkhla Plant, 2019	RGB - Returnable Glass Bottle		NRGB - Non Returnable Glass Bottle	Sleek CAN			PET Bottle			
	10 Oz.	1 Litre	BUDDY	Can 325 ml. & 330 ml.	Can 240 ml.	Can 180 ml.	450 ml.	500 ml.	590 ml.	2 L.
Production Capacity	5,100,000	2,202,000	3,617,000	2,837,000	3,907,000	238,000	1,438,000	923,000	608,000	1,953,000
Actual Production	1,186,974	267,820	439,966	2,147,978	2,958,051	180,201	896,289	575,033	378,760	1,216,955
% Production Utilization	23.3%	12.2%	12.2%	75.7%	75.7%	75.7%	62.3%	62.3%	62.3%	62.3%

Source: HaadThip Public Company Limited (2020)

Table 2.2 Poonpin Production Capacity

Poonpin, Surat Thani Plant, 2019	Sleek Can	PET Bottle							
	300 ml.	450 ml.	999 ml.	1.25 L.	1.5 L.	350 ml. (Namthip)	550 ml. (Namthip)	1.5 L (Namthip)	570 ml. (Namthip)
Production Capacity	406,000	22,840,000	2,878,000	7,985,000	1,934,000	1,302,000	3,248,000	1,223,000	12,000
Actual Production	316,508	17,803,398	2,243,589	6,224,613	1,507,231	1,047,974	2,531,517	953,346	9,631
% Production Utilization	78.0%	77.9%	78.0%	78.0%	77.9%	80.5%	77.9%	78.0%	80.3%

Source: HaadThip Public Company Limited (2020)

2.3.1 Machine Capacities

PET filling machine has capacity to fill beverages 600 bottles per minute or 36,000 bottles per hour (Haadthip Public Company Limited, 2014).

Can filling machine currently has capacity to fill 350 cans/minutes but the company will be upgraded to the new machine with 600 cans/minutes in 2020 (Haadthip Public Company Limited, 2020).

2.4 Strategies

According to Charan Kullavanijaya (Chairman) and Patchara Rattakul (CEO), “the company’s goal is for the business to continuously grow, with the target for sales growth at approximately 5% from the year 2019” whereas the company will continue working on the following:

1. To encapsulate new customer behaviors and adapt the company in order to making distribution channels excellent
2. Emphasizes advertising campaign to match each customer needs and demands.
3. Closely monitor company’s operating expenses in order to optimize cost of goods sold and cost of sales.

4. Introduce technology to improve efficiency and effectiveness in operation and sales activities.

5. To prioritize the necessity of capital expenditure purchases and plans and expense overruns.

2.4.1 Investment in Subsidiary Company

According to 2019 Annual Report of HaadThip, the company subsidiary holds 99.99% in Southern Rocks Company Limited. Southern Rocks Company Limited is the manufacturer and distributor of preform plastic bottles (HaadThip Public Company Limited, 2020).



Figure 2.12 HaadThip Business Structure

Source: HaadThip Public Company Limited (2020)

2.4.2 Organization Structure

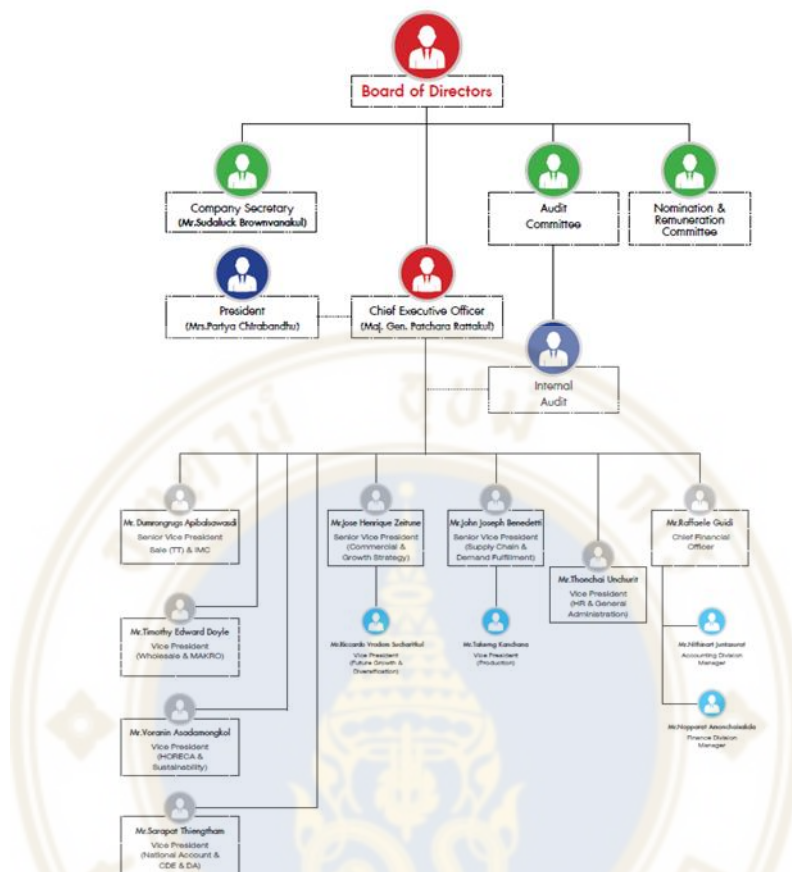


Figure 2.13 Organization Chart

Source: HaadThip Public Company Limited (2020)

2.4.3 Shareholder Structure

According to HaadThip Company's 2019 annual report as of April 2020, the majority of HaadThip's shares were distributed to Thai investors 72.5% and 27.5% to foreign investors (HaadThip Public Company Limited, 2020).

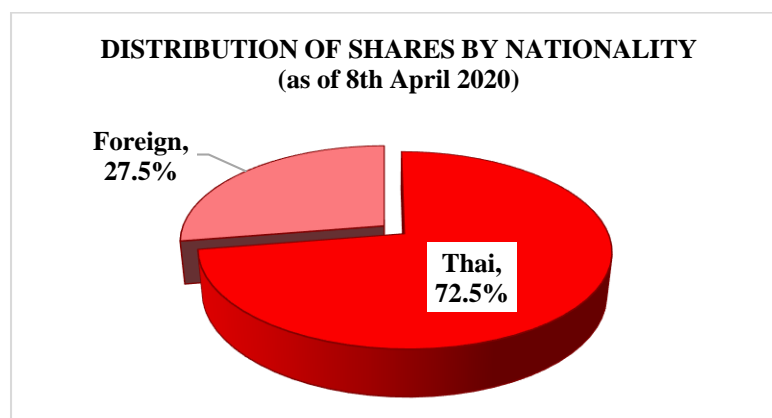


Figure 2.14 Distribution of Shares by nationality

Source: HaadThip Public Company Limited (2020)

Below figure shows shareholders structure of Haad Thip Company where 30.5% distributed to Sec. Lt. Phairoch Rattakul family's group, the founder of HaadThip company followed by 24.4% Gutsche Family Investments (Proprietary) Limited (HaadThip Public Company Limited, 2020).

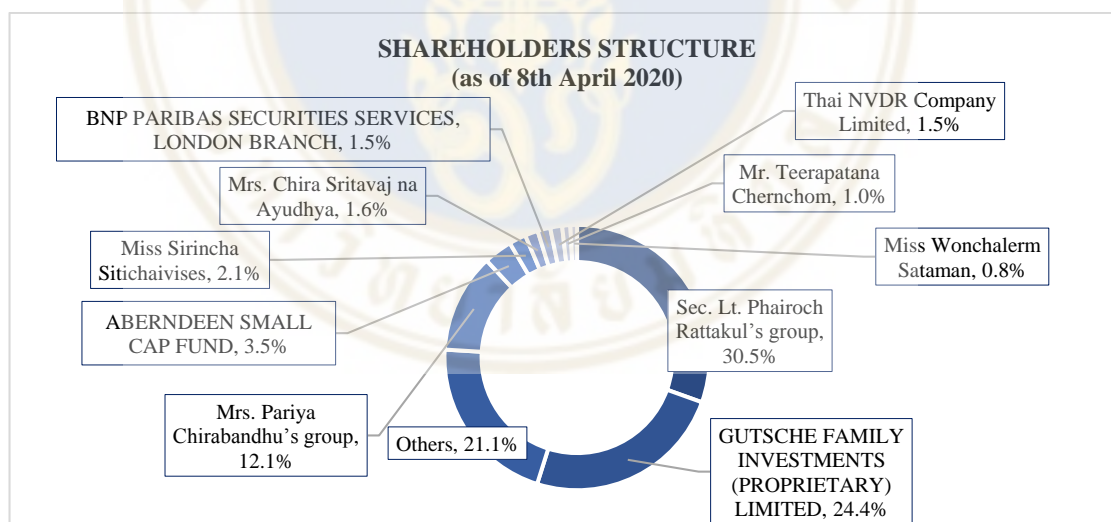


Figure 2.15 Shareholder structure

Source: HaadThip Public Company Limited (2020)

CHAPTER III

INDUSTRY OUTLOOK AND MACROECONOMIC ANALYSIS

3.1 Market Outlook

The food industry is a high profit industry worth 236 trillion USD with expected compound annual growth rate of 10.70% (Statista.com, 2020). Thailand is one of the biggest global food exporters with more than 35 million tons of exported products and domestic trade of 2 trillion Baht (Apisitniran, 2020). According to BOI, Thailand's food and beverage industry contributed 23% of total country's GDP (Gross Domestic Products) worth approximately 1.05 trillion USD and expected to grow 5% each year (Board of Investment, 2017).

The world beverage industry is worth 2.15 trillion USD with 950 billion liters of drink consumption, whereas 65% came from Non-alcoholic beverages (Yongpisanphob, 2019). Asia-Pacific region's non-alcoholic consumption is 33% by volume globally (Yongpisanphob, 2019). Thailand's carbonated soft drink market is worth 56 billion Baht in 2019 and it is an oligopoly since there are few competitors where 30% is carbonated drinks (Yongpisanphob, 2019). 71% of the total carbonated drink contributed to cola-drinks and the remaining 23% belonged to flavored drinks (Jitpleecheep, 2020). Yongpisanphob stated 38% of carbonated beverages belonged to Coca-Cola drinks followed by Pepsi 18%, Fanta 18% and 26% distributed by others (Yongpisanphob, 2019). The Thai carbonated beverage industry is expected to grow year over year, premised on the following:

1. Urbanization as the income is rising
2. Global warming as the world's temperature tends to rise each year

3.2 Industry Analysis

HaadThip Public Company Limited is engaged in the soft drink industry and copyrighted by Coca-Cola Company (USA), Atlanta, Georgia to be a manufacturer and distributor of carbonated soft drinks under the trademarks "Coca-Cola", "Fanta", "Sprite" and other products owned by Coca-Cola (including mini-fruit juice and water). Currently contract start date from 1 January 2019 to 31 December 2023 and the contract is renewed every 5 years.

Carbonated drink is a seasonal product, especially in the summer of every year when the weather is hot. There will be more sales than other seasons, so during that time, A company uses the concept of marketing through the main media, namely via television, social media and print media to create a flow of feedback from consumers through promotional activities to reach the target consumers as much as possible (HaadThip, 2019).

According to HaadThip company, the main raw materials are following:

1. Concentrates contributed 27.02% of raw material cost
2. Liquid sucrose contributed 22.72% of raw material cost
3. Packaging including PET bottles, Cans, Regular Glass Bottle (RBG), and One-Way Glass (OWG) contributed 49.22% of raw material cost

3.2.1 Impact on Raw Material to The Business

3.2.1.1 Sugar

According to Econ, the taxation of sugary beverages has been announced to increased double from October 1, 2019 onwards with an incremental increase in doubled every two years (Econ, 2019). The advanced increase in tax is aiming to force the manufacturer to reconsidered and cut down the amount of sugar content in their products. The sugar content taxation based on 100 milliliters has been classified into 6 levels with thresholds as displayed below:

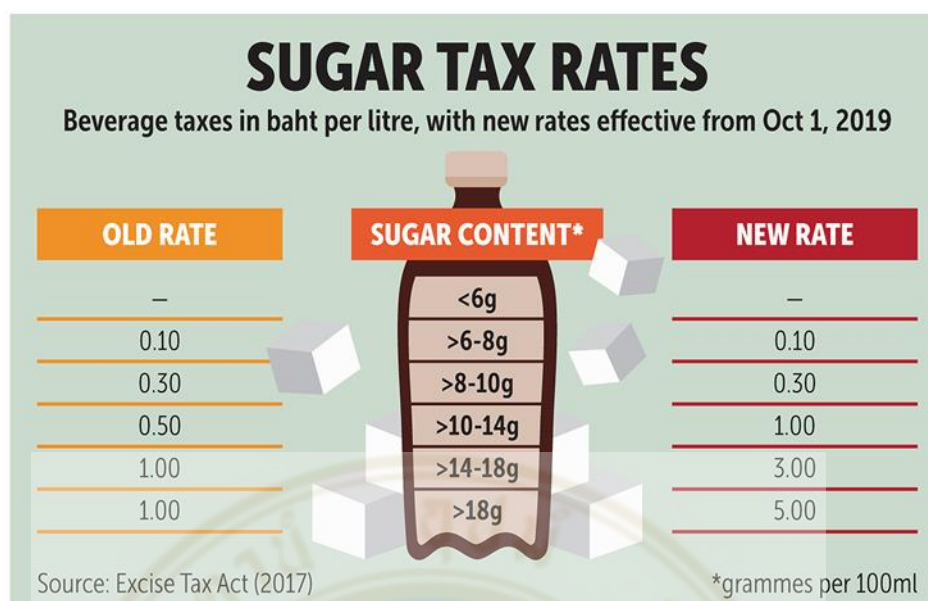


Figure 3.1 Sugar tax rate

Source: Bangkok Post (2020)

According to HaadThip, there are 39 grams of sugar in 354 milliliters of Coke in an original flavor (HaadThip Public Company Limited, 2020). As a result, from the new tax rate, the company is required to pay five times the old rate if the company doesn't adjust sugar recipe in their products.

3.2.1.2 PET (Polyethylene terephthalate)

PET is a kind of plastic packaging material, which has been invented for packaging soft drinks, especially the special characteristic of sparkle. The biggest revenue of HaadThip came from PET which is 83% of total revenue by package. Making it popular in the packaging of vegetable oils and drinking water because it is a material barrier of water and moisture. These reasons PET is widely used for mineral water and carbonated soft drinks (Omnexus, n.d).

Consumer behavior changes consumption from non-returnable glass bottles such as PET or can more than returnable glass bottles due to the current situation. It is convenient to carry and no deposit to require like glass. According to the distribution channel of modern trade and convenience stores, revenue increasing from expansion retail stores in contrast with global glass bottles has a decreasing trend (HaadThip, 2019). According to Bloomberg, Production capacity, which is forecast to grow an average by 2.60% annually and demand for polyethylene expected growth by

2.30% per year that is higher than demand. The excess supply will remain at a low level and polyethylene spreads will not change or slightly increase.

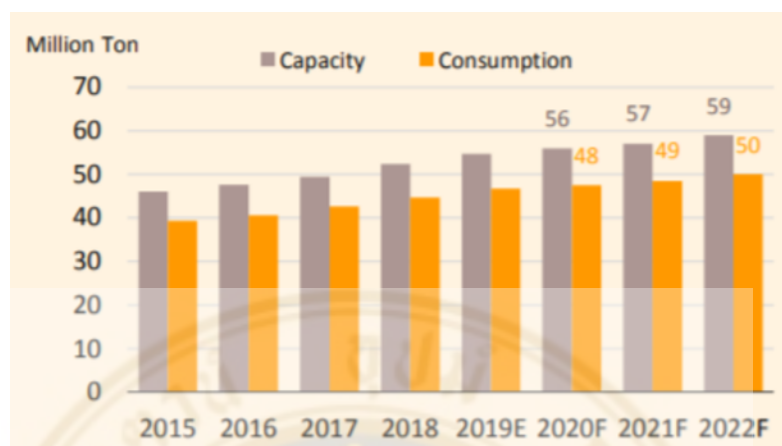


Figure 3.2 Polyethylene demand and supply

Source: Krungsri research (2020)

3.3 Competitor Analysis

Sermsuk is a big competitor when compared with HaadThip based on revenues from carbonated soft drinks (Est, 100 Plus, Sarsi) and non-carbonated soft drinks (Oishi, PowerPlus, Ranger), distribution channels and customer market.

Sermsuk Public Company Limited started the soft drink business in 1953. Later, Thai Beverage Logistics Co., Ltd. acquired a majority stake in the company and merged into one of the 5 main companies in the ThaiBev Group in 2012. Sermsuk has changed the direction of the business as well as corporate image and organizational culture consequent with market changes and consumer demand in the same year, Sermsuk currently operates the production and distribution of quality food and beverages under four main business. Soft drink is the largest business group, drinking water group, non-carbonated drinks and distribution group. (Sermsuk, 2019).

3.3.1 The Company's Shareholding Structure

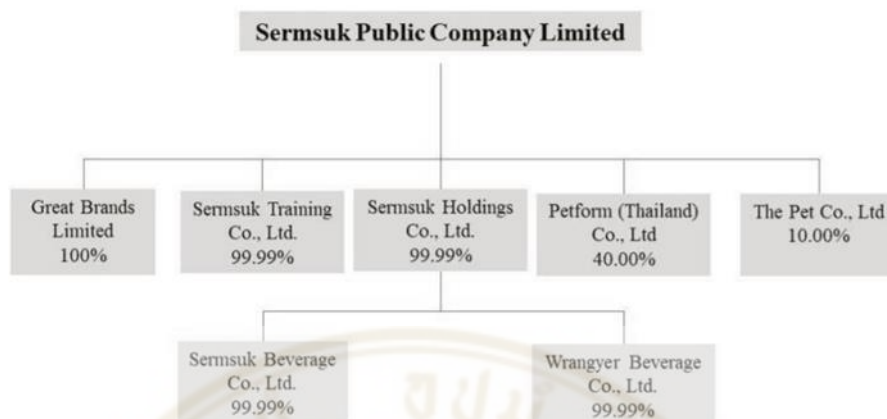


Figure 3.3 Sermsuk's Shareholding Structure

Source: Sermsuk (2019)

Petform (Thailand) Co., Ltd. is held by Sermsuk 40% of the equity. It is a manufacturer and distributor of PET polymers, which use PET bottles, and plastic production. The shareholding structure shows Sermsuk has a backward integration to expand the business in order to reduce risk of price deficits and the lack of materials that needed to be processed in main businesses.

3.3.2 Nature of business

Company product and services are clustered into 4 businesses as follows:

- Manufacturer and distributor of drinking water under “Crystal” trademark
- Manufacturer and distributor of non-carbonated beverages under the “Oishi, Ranger and PowerPlus” trademark
- Manufacturer and distributor of carbonated beverages under “Est, 100 Plus and Sarsi” trademark
- Beverage distributor under “Oishi, Rock Mountain and Jubjai” trademark



Figure 3.4 Sermsuk Product's portfolio

Source: Sermsuk (2019)

3.3.1 Revenue Structure

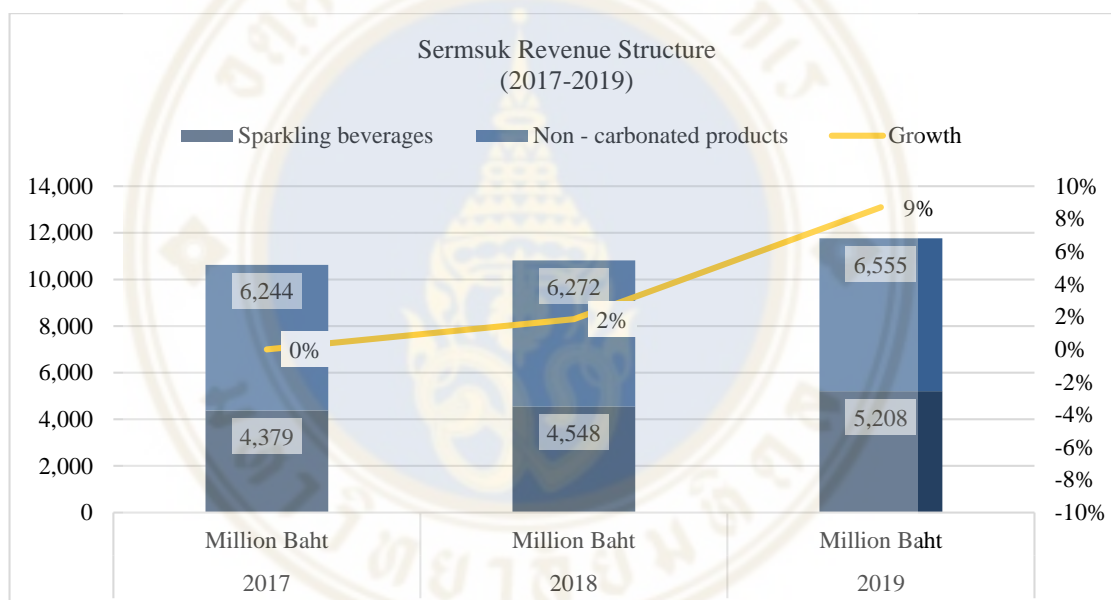


Figure 3.5 Sermsuk Revenue Structure

Source: Sermsuk (2019)

According to the company annual report for 2017 to 2019, the main source of Sermsuk revenue comes from non-carbonated beverages approximately 55%. The company's revenue has been increasing year over year from carbonated and decreasing non-carbonated beverages where in 2019, the revenue improved by 9% from 2018 resulted from prices adjustments in the fourth quarter of 2019, successful implementation from expand the distribution channel of Crystal and Est including launch EST Play Honey lemon (Sermsuk, 2020).

3.4 Macro-Economic Analysis

3.4.1 SWOT Analysis

Table 3.1 SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> • Exclusive distributor and manufacturer in southern provinces for Coca Cola brands • Lots of distribution channels • Broad product range • High brand awareness • Good relationship with famous HORECA brands • Customer Loyalty • Food, Halal certificate 	<p>Weakness</p> <ul style="list-style-type: none"> • Low bargaining power for ingredients eg. Syrup • High fixed costs (Licensing) and unable to sell outside territory (Northern Provinces) • Products are considered as unhealthy • Sugar tax • Environmental concerns
<p>Opportunities</p> <ul style="list-style-type: none"> • Company market share in sparkling business is number one in the South market • Mother's company always sponsor in a big events • Technology advancement, especially internet making advertising easier • Expansion of retail stores. • Oligopoly for carbonated drinks 	<p>Threats</p> <ul style="list-style-type: none"> • Growing in health-conscious consumers (Reducing demand in carbonated drinks) • Increasing rate of sugar excise tax • Increasing of Raw Material Prices (Plastic bottles, sugar) • Natural disasters (flood, COVID – 19) • Many substitution products (E.g. Soda and fruit beverages) • Strong competitors (Pepsi and Est. Cola)

3.4.2 Five Force Model Analysis

3.4.2.1 Rivalry among current competitors: Low

HaadThip holds the right for Coca Cola brands to exclusively distribute in fourteen southern provinces of Thailand and Coca Cola support money for marketing activities. The company created an engagement in aggressive marketing to gain number one in market share.

3.4.2.2 Bargaining power of customers: Moderate

The customer can buy a similar product from competitors where it was easy to choose and convenience at that time without transfer cost.

In this regard, carbonated drinks are one of 205 products that Ministry of Commerce monitors and has a criterion for adjustment price. The company must inform the price change at least 15 days in advance and the Ministry of Commerce will consider the reasonable price in accordance with the cost. If there is no reasonable reason, the price will not be adjusted (Posttoday, 2019).

However, there are a number of factors that operators should be aware of in response to this threat, such as the affordable price, quality and promotions. A company needs to balance themselves and customers to ensure their marketing is sustainable development of their business.

3.4.2.3 Bargaining power of suppliers: Moderate

HaadThip and Thainamthip purchased raw material which is concentrated from Singapore which is 27.02% of the total purchase value of raw materials. Liquid sucrose from Banrai industry is 22.72% of the total purchase value of raw materials. Carbon Dioxide is 0.75% and chemicals are 0.29%. The overall main raw material has an order value of 50.78% of the total raw material purchase value. It shows that the company has lower backward integration, which means that the company has a middle man to make a profit during the supply chain. The company cannot reduce these input costs. Therefore, the company must establish a good relationship with suppliers to obtain more information and market trends to forecast production.

3.4.2.4 The threat of substitute products or service: High

The product in the market is not different from customer view and has a substitute product. Expectedly foreigners, they want to try natural fruits in

Thailand such as coconut water, orange juice that can be a substitute product. Healthy trend that has the power to enforce customers to be careful with food and beverages.

Aga Jarzabek (2020) from Euromonitor International estimates, that in addition to the packaged water, sports drinks will continue to grow with sales expected to increase in 2020 and remain above growth forecasts through 2024.

As a result of an increasingly healthy lifestyle trend, consumers are paying more attention to their health that enhances companies to launch a new product for serving a customer too. In 2019 management focused on Coca-Cola non-sugar, revenue from the non-sugar Coca-Cola increased significantly higher than 50%. Coke zero, a company product has to challenge the market and consumer behavior.

3.4.2.5 The Threat of New Entrance: Low

New entrepreneurs have difficulties to get into these businesses because a high level of investment is inevitable in order to create a brand and demand, buy machines, inventory, warehouse and channels for distribution. HaadThip has manufacturing plants in Hatyai District, Songkhla Province, and manufacturing plants in Phunphin District, Suratthani Province, as well as 20 sub-warehouses scattered throughout the 14 provinces of the South, in which some provinces have more than one sub-warehouse. Some new entrants have entered the Thai beverage markets (green tea, health drinks, etc.), although I agree they cannot compete easily with the famous soda brands of Coca Cola.

CHAPTER IV

VALUATION

4.1 Financial Analysis

The carbonated drink industry is an oligopoly with a few players in the market due to the licensing of the brand and the need for high capital resources for manufacturing (Yongpisanphob, 2019). The market value of Thailand's carbonated soft drink market is 56 Billion Baht where 78% belonged to Coke and Pepsi. The major players are the manufacturers of global brands namely "Coca-Cola", "Pepsi" and the local brand "Est Cola" (Jitpleecheep, 2020). According to SET HaadThip has 6.88 Billion of market capitalization. There are 4 main leading competitors in the carbonated drink industry besides of HaadThip as follows: (HaadThip, 2020)

1. ThaiNamthip Ltd., the Coca-Cola products manufacturer and distributor where the company is on agreement with the Coca-Cola company to serve central and north region of Thailand.
2. Serm Suk Public Company Limited, the Est Cola manufacturer and distributor
3. Pepsi-Cola (Thai) Trading Company Limited, the Pepsi manufacturer and distributor
4. Aje Thai Co., Ltd., the Big Cola manufacturer and distributor

4.1.1 Financial Highlight

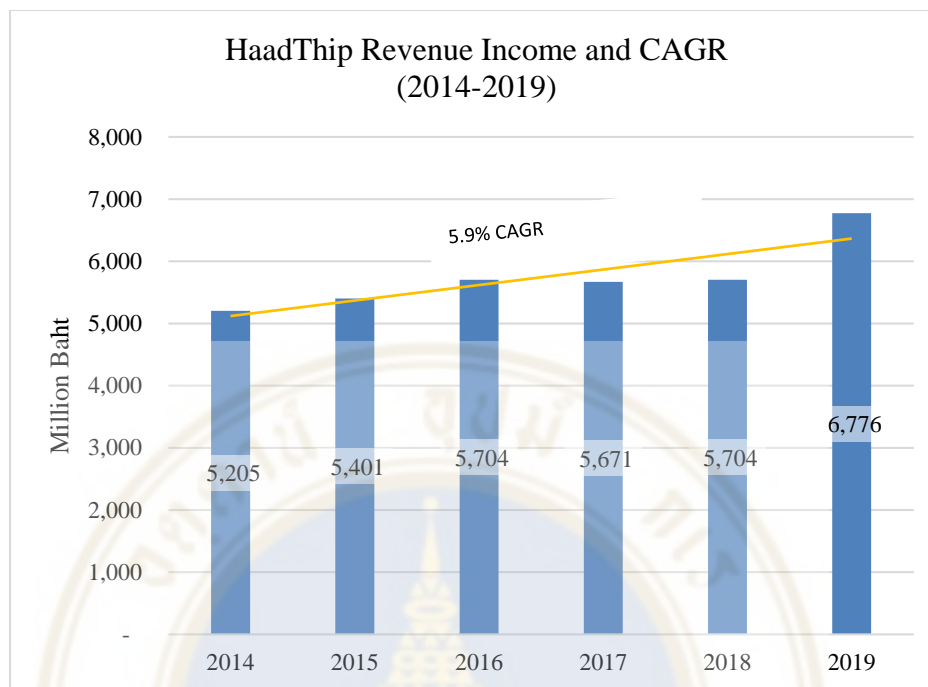


Figure 4.1 2014 – 2019 HaadThip Revenue Income and CAGR

Source: HaadThip (2020)

According to the company's publication, the company 5 years compound annual growth rate from 2015-2019 is 7.8%, with a slightly decrease in sales revenue during 2017 due to the severe flooding that interrupted the warehouse and distribution channels (HaadThip Public Company Limited, 2020).

Table 4.1 The company historical overall performance

Haadthip-HTC	2557	2558	2559	2560	2561	2562
Unit (Million Baht)	2014	2015	2016	2017	2018	2019
SALES (Only Domestic)	5,205	5,401	5,704	5,671	5,704	6,776
- Domestic % YoY Growth		3.8%	5.6%	-0.6%	0.6%	18.8%
OTHER INCOME	61	58	28	20	19	17
TOTAL	5,266	5,459	5,732	5,691	5,723	6,792
COGS/SALES	72%	71%	69%	68%	66%	62%
COST OF SALES	3,726	3,858	3,935	3,836	3,780	4,184
% Cost of Sales Growth		4%	2%	-3%	-1%	11%
GROSS PROFIT	1,539	1,601	1,797	1,855	1,943	2,609
% Gross Profit		4%	12%	3%	5%	34%
SELLING AND ADMIN. EXPENSES	1,335	1,466	1,502	1,515	1,643	2,107
- Selling	1,025	1,069	1,045	988	1,180	1,416
- Admin	310	397	456	527	462	692
OPERATING PROFIT	204	135	296	340	300	501
OTHER EXPENSES	0.27	-	7	-	-	-
EBIT	204	135	288	340	300	501
FINANCE COSTS	34	29	40	39	30	24
TAX	0	5	7	17	21	36
PROFIT	169	101	241	283	249	441
NON CONTROLLING INTERESTS	0.006	0.004	0.012	0.009	0.005	0.019
NET PROFIT TO EQUITY HOLDERS OF PARENT	169	101	241	283	249	441
NUMBER OF SHARES (MN)	199	199	199	199	199	201
EARNINGS PER SHARE (BT)	0.85	0.51	1.21	1.42	1.25	2.19
GROSS MARGIN	29.2%	29.3%	31.4%	32.6%	33.9%	38.4%

Source: HaadThip Public Company Limited (2020)

From the consolidated sales revenue of 2019, HaadThip's revenue increased by 18.8% from 2018, from sparkling drinks price adjustment and successful implementation of promotion and marketing campaign whereas 93% of revenue came from the sparkling beverages in PET package (HaadThip Public Company Limited, 2020).

4.1.1.1 Cost of Sales and Gross Profit

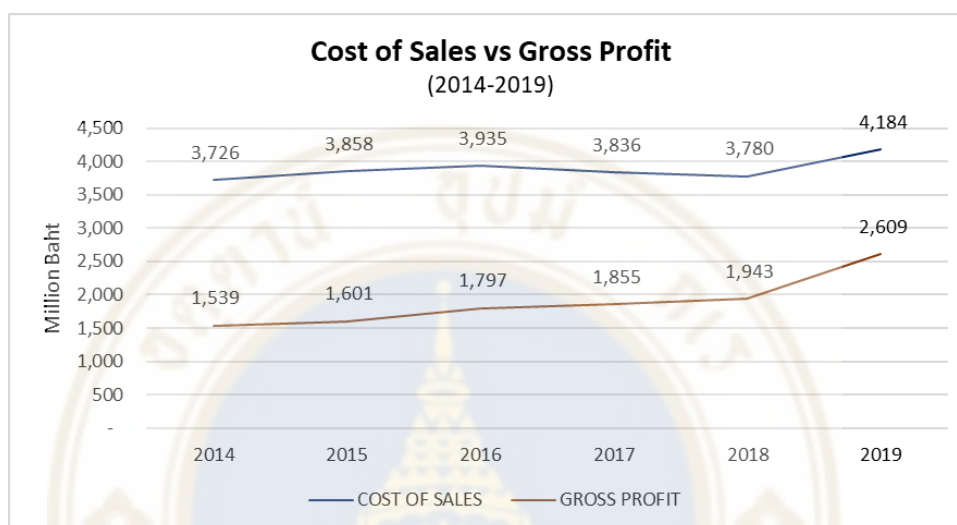


Figure 4.2 HaadThip Cost of Sales vs Gross Profit performance

Source: HaadThip Public Company Limited (2020)

The company cost of goods sold increased 458 Million Baht or 9.2% CAGR with respect to the growth in sale volume. Though there was an increase in cost of goods sold, there was also an implementation of product price adjustment, the optimization of unit production from economy of scale, and a successful execution of sales promotion and marketing campaign resulted in the 34% growth in gross profit from 2018 to 2019.

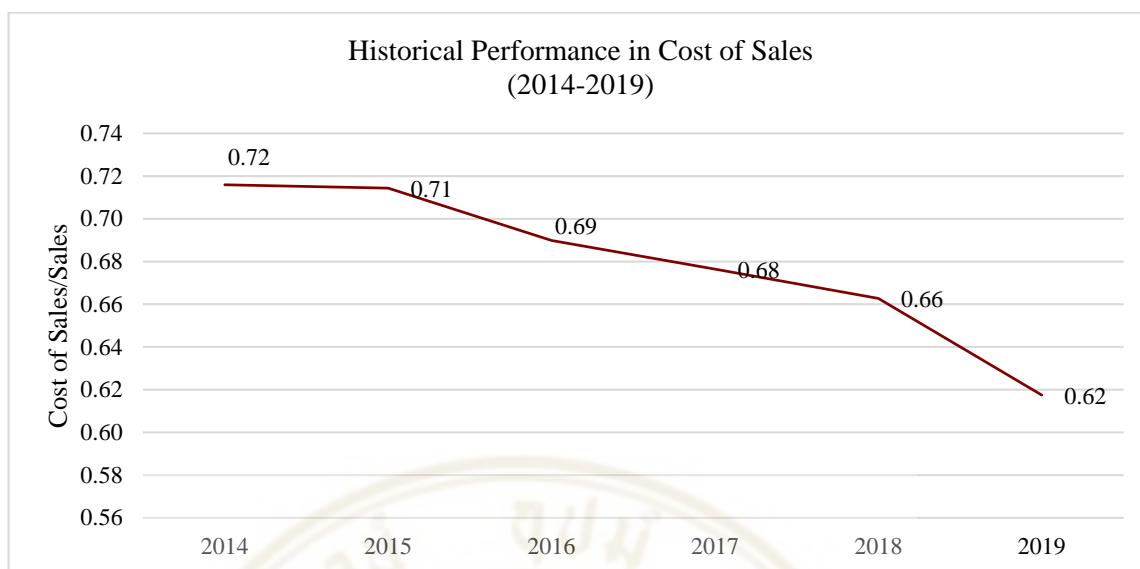


Figure 4.3 HaadThip Cost of Sales Rate Performance

Source: HaadThip Public Company Limited (2020)

The above figure illustrates a decline in the cost of sales rate from 2014-2019 indicate that the company has achieved operational excellence of continuing improvement in their operation.

4.1.1.2 Earnings Before Interest and Taxes (EBIT)

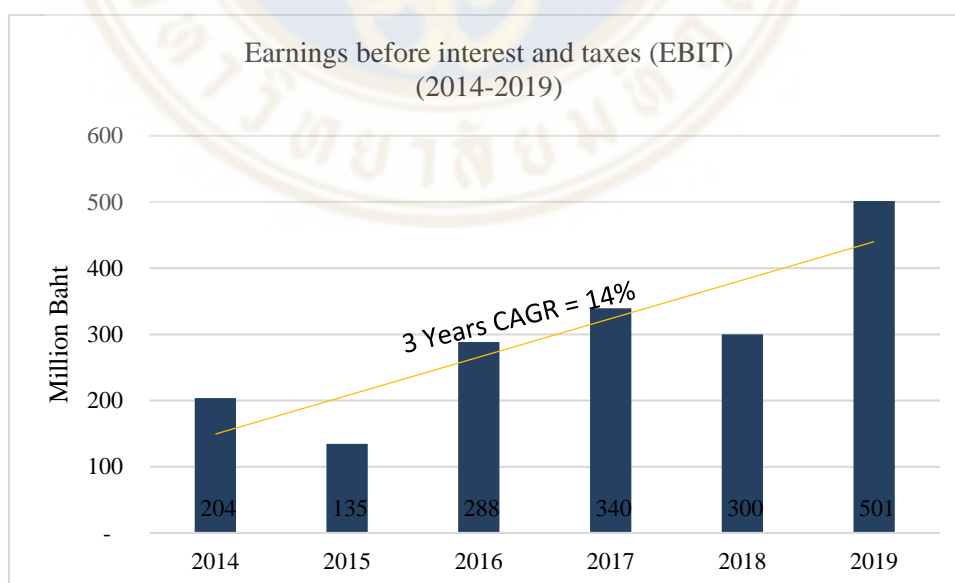


Figure 4.4 HaadThip EBIT Performance

Source: HaadThip Public Company Limited (2020)

According to the company's publication, EBIT from 2018 to 2019 went up by 67% with respect to an increase in sales and the increase in gross profit with 3 years compound annual growth rate of 14%.

4.1.2 Financial Ratio

4.1.1.1 Liquidity Ratio

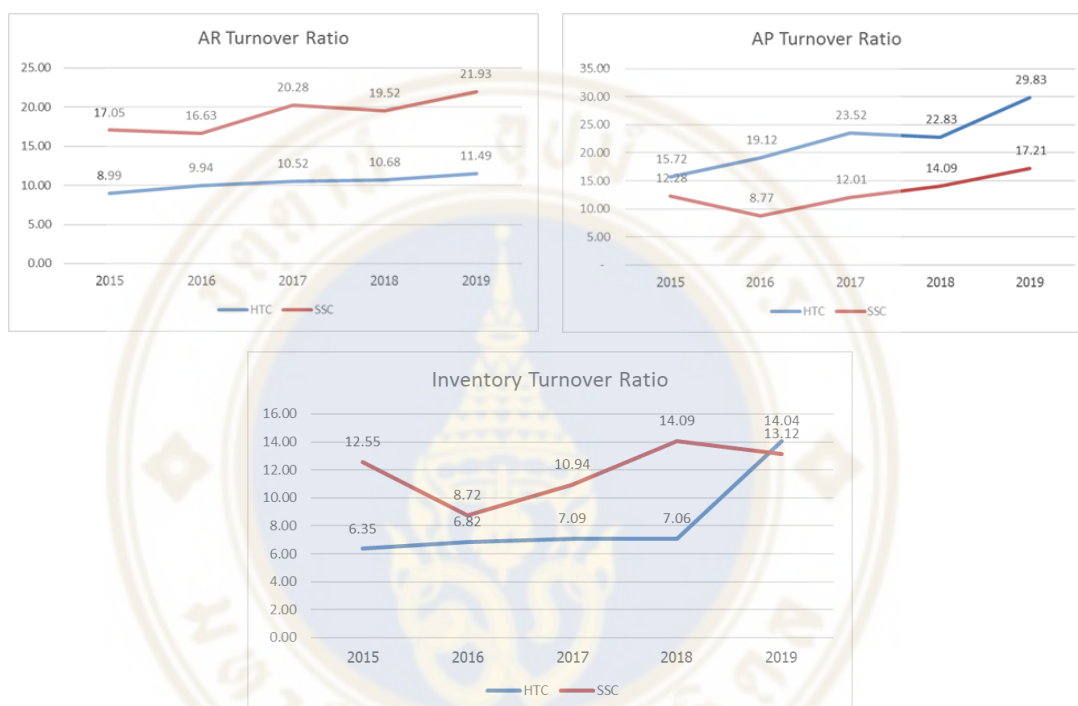


Figure 4.5 Turnover Ratio

According to the above figure shown the comparison of HaadThip and Serm Suk companies. Serm Suk company is the company that is a competitor to HaadThip as they are manufacturing and distributing the substitute products with different labels. Both companies' level of accounts receivable turnover quite stable and SSC has higher accounts receivable turnover.

Accounts payable turnover of HTC is higher inventory turnover than SSC, however, accounts payable turnover of HTC and SSC trend to increase year over year. From 2015 to 2018, HTC has a stable inventory turnover and it tends to increase in 2019 higher than SSC. However, the inventory turnover in both companies is slightly

increasing. The reason for the growth rate of the cost of goods sold lower than the growth rate of average inventory.

Overall, the company's operational performance in terms of managing cash reflects AR turnover and AP turnover increasing year over year for SCC and HTC. The inventory turnover performance of SCC is higher than HTC over the past four years from 2015 to 2018, however, HTC's inventory turnover performance is improved significantly as it is better than SCC during 2019. The HTC inventory turnover performance is drastically increased means the company improved its sales performance and ability to sell goods quickly. The resulted from efficient operational management such as an improvement of supply chain management of integration between the production planning process and sales and marketing management (HaadThip Public Company Limited, 2020).

4.1.2.2 Sensitivity Analysis

“Sensitivity analysis is a method for predicting the outcome of a decision if a situation turns out to be different compared to the key predictions. It helps in assessing the riskiness of a firm” (Damodaran, n.d.).

Table 4.2 Sensitivity Analysis

HTC	2019	2018	2017	2016	2015
DOL	5.20	6.47	5.46	6.23	11.88
DFL	1.05	1.11	1.13	1.16	1.28
DTL	5.47	7.20	6.17	7.24	15.17

SSC	2019	2018	2017	2016	2015
DOL	(12.67)	(13.60)	(14.56)	44.47	(9.87)
DFL	1.00	1.00	1.00	1.00	1.00
DTL	(12.67)	(13.60)	(14.56)	44.47	(9.87)

“The degree of operating leverage or DOL is a ratio that shows how well a company manages its fixed costs to generate operating income or EBIT (Earnings before Interest and Taxes)” (Corporatefinanceinstitute, 2019). HTC has more DOL value than SSC in the most of the years. For SSC, it has negative DOL, but in 2016

DOL is positive. Overall SSC has a DOL lower than HTC which can be explained that SSC's operational risk grows bigger because variable cost of SSC grows faster than sales growth rate.

“The degree of financial leverage is calculated by percentage change with EPS divided by percentage change in EBIT, an increase of debt in capital structure will increase the financial risk because of the reason that debt comes with interest payments” (Corporatefinanceinstitute, 2019). Both two companies' DFL values are not much different when comparing DFL of two companies, HTC is higher than SSC.

Both higher operating (Fixed Cost) and Financial Leverage (Debt) leads to higher total risk to shareholders because a small decline in sales causes a larger percentage decline in net income. The combined effect of two leverages is measured by degree of total leverage (DTL).

HTC and SSC should aware to control not only their fixed cost and variable cost but also their liabilities. If not doing so, in the long term, more net income would not grow proportionally with more sales.

4.2 The Discounted Cash Flow Valuation Method

The discounted cash flow valuation method is the financial approach to model the value of a company by evaluating a company's growth potential and risks, by forecasting the expected cash flows and using net present value to value those cash flows, taking the time value of money into consideration (Corporatefinanceinstitute, 2019).

The discounted cash flow valuation method is broadly used in many businesses and types of firms. The method involves evaluating the firm value by using a set of assumptions to forecast future events, growth or risks (Streetofwalls, n.d.). Thus, it is very crucial for the analyst when using the discounted cash flow valuation method to apply concrete and referenceable assumptions and projections to avoid wrong assumptions in order obtain the most accurate intrinsic value of a stock (Streetofwalls, n.d).

The discounted cash flow valuation for HaadThip company is based on free cash flow to firm valuation method, as this method referred to unlevered free cash flow where it includes debt and equity to all investors. Therefore, the discounted cash flow

with unlevered free cash flow (Free Cash Flow to The Firm) is the method to identify the “enterprise value”.

4.2.1 Assumption

4.2.1.1 Domestic Revenues

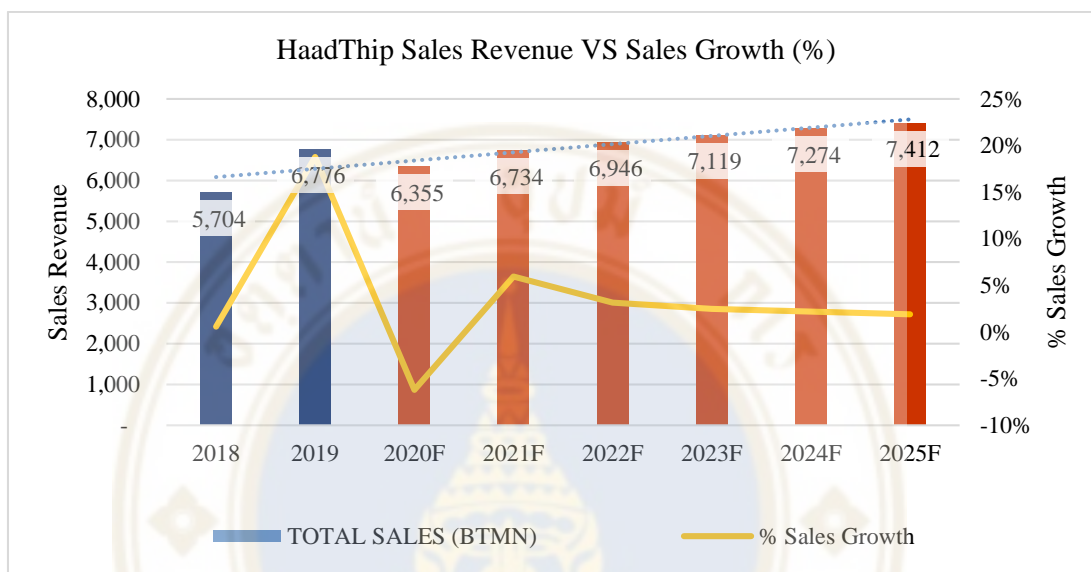


Figure 4.6 HaadThip Sales Revenue VS Sales Growth (%)

Source: HaadThip Public Company Limited (2020)

According to the Quarter 2 Management Discussion & Analysis letter, HaadThip reported the global impact of the COVID-19 pandemic decreased HaadThip’s beverage consumption by 10%, resulting in a reduction of 6.53% in sales compared to the same period in 2019 (HaadThip Public Company Limited, 2020). The main distribution of HaadThip Non-Alcoholics Ready to Drink (NARTD) products is HORECA (Hotel, Restaurant, and Catering) in the southern Thailand area, where 3.9 million foreign tourists visited during 2019 and 25% of those tourists are Chinese. So, when the foreign and local governments adopted the quarantine regulations, the area went into sudden economic shock and resulting in decreased sales of HaadThip tourism-related distribution channels by 3.5 million-unit cases, equal to 227.26 million Baht compared to the same period last year 2019 (HaadThip Public Company Limited, 2020).

Table 4.3 Domestic Volume Share Forecast of NARTD

	2557 2014	2558 2015	2559 2016	2560 2017	2561 2018	2562 2019	2020F	2021F	2022F	2023F	2024F	2025F
AVERAGE Thailand NARTD Domestic Volume Share (%)	21%	23%	23%	24%	25%	25%	24%	24.64%	24.72%	24.72%	24.72%	24.72%
Thailand NART Domestic Volume Share (%) from the company	0%	0%	0%	23%	24%	25%	26%	26.43%	26.50%	26.50%	26.50%	26.50%
Estimated Thailand NARTF Domestic Volume Share (%) from southern area sales growth	21%	23%	23%	24%	25%	25%	26%	26.39%	26.50%	26.50%	26.50%	26.50%
Southern Thailand sparkling NARTD Domestic Volume (%)	78%	83%	84%	84%	84%	84%						
Southern Thailand sparkling NARTD Domestic Volume Growth (%)	7%	1%	0%	0%	0%	0%						

Source: HaadThip Public Company Limited (2020)

According to the company's publication, the company expects the domestic volume share to decrease from 2019 by 6.7% due to the pandemic effect (HaadThip Public Company Limited, 2020).

However, the government has loosened the locked down restrictions during the third quarter of 2020, this will open the opportunity of an increase in the sales from HORECA (Hotel, Restaurant, and Catering) channels. Consequently, the assumption of 2020 forecast bases on the historical 3 years CAGR domestic volume with a 6.7% decrease in volume share due to COVID-19 effect resulted in 23.97% of average non-alcohol ready to drink (NARTD) volume share. With only the Thai domestic local tourists visiting the southern area, the 2020 sales forecast of HaadThip is expected to be decrease by 6.2% compared to 2019. The forecast of domestic volume share of 2021 to 2025 is expected to gradually increase 0.6% from 5 Years CAGR as the foreign tourists will be returning to the area, together with the new sales and promotion campaign that the company will also focus on non-carbonated products, it is expected to generate 0.8% rise in domestic volume sales from 3 Years CAGR. As the company is a leading company in the carbonated beverage market in the southern Thailand, the growth in sales is expected to be approximately 2.2% during 2022 to 2025 (HaadThip Public Company Limited, 2020).

4.2.1.2 Capital Expenditure (CAPEX)

The capital expenditure is determining the growth in fixed assets. The forecast of capital expenditure is based on the change in average historical CAPEX for three consecutive years (2016 - 2019) as the company had the big investment in 2016, the percentage growth in CAPEX would be approximately at 8% to maintain the business at the same level and for maintenance of equipment (HaadThip Public Company Limited, 2020).

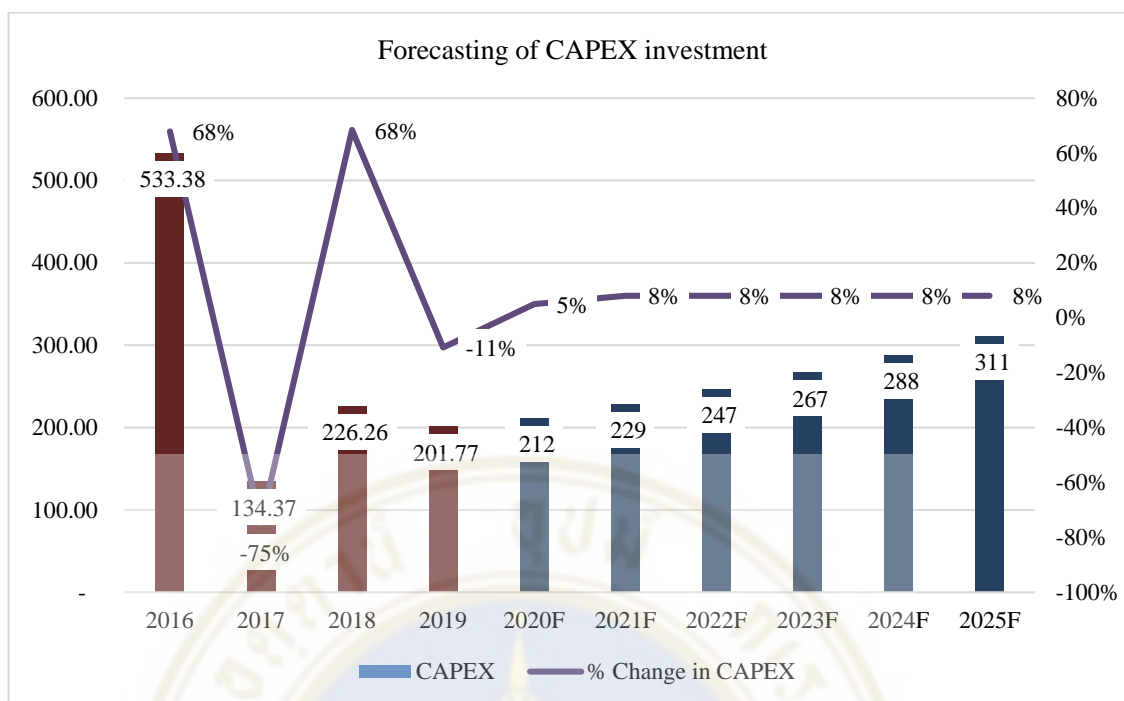


Figure 4.7 HaadThip's CAPEX Investment Forecast

Source: HaadThip Public Company Limited (2020)

4.2.1.3 Depreciation

The depreciation and amortization forecasts are based on the past five consecutive years (2015 - 2019) with the 8% average constant growth rate of the depreciation charge. As HaadThip is a manufacturing company, there is a need for the company to invest in the new technology and machines in order to keep their operations efficient (HaadThip Public Company Limited, 2020).

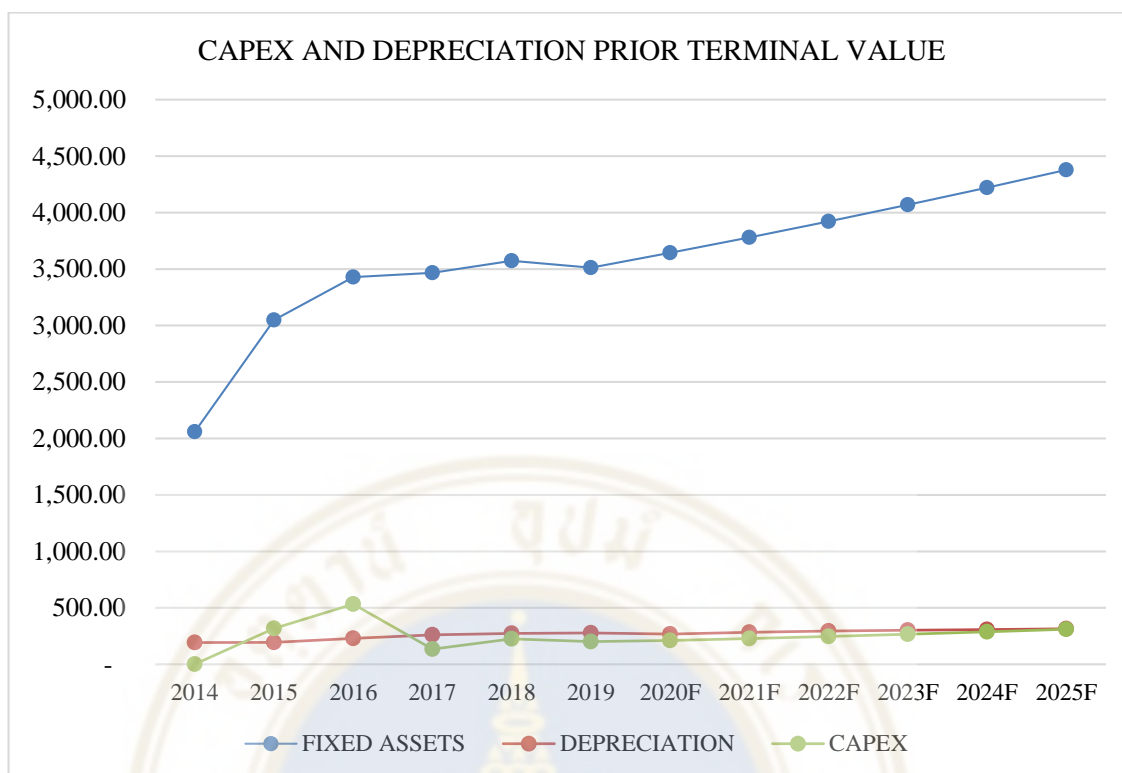


Figure 4.8 HaadThip CAPEX and Depreciation Forecast

Source: HaadThip Public Company Limited (2020)

4.2.1.4 Corporate Income Tax

According to BOI, “Thai corporate income tax at the regular 20% rate on income derived from its business operations in Thailand” (BOI, 2020). So, the corporate income tax rate for HaadThip is assumed to be 20%, following the Bureau of Internal Revenue’s standard.

4.2.1.5 Change in Working Capital

Table 4.4 Change in Working Capital

Unit (Million Baht)	2014	2015	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
WORKING CAPITAL												
A/C RECEIVABLES	668	607	546	536	535	647	609	646	666	683	698	711
INVENTORY	355	339	277	253	280	316	227	238	243	252	256	261
A/C PAYABLES	343	347	252	232	270	186	170	178	182	189	192	195
WORKING CAPITAL	679	599	570	557	546	777	666	705	727	745	762	776
WORKING CAPITAL CHANGE	0	(80)	(29)	(13)	(11)	232	(111)	39	22	19	16	14

Source: HaadThip Public Company Limited (2020)

The working capital is derived from account receivable plus inventory less account payable. With an expected increase in sales by 2.7% from 3 Years CAGR resulted in higher number of account receivables, inventory, and account payables. The assumption for 2020-2025 forecasts based on maintaining 35 days of account receivables, 20 days of inventory, and 15 days of account payables while maintain 40 days of cash cycle. The working capital change derived from the different between working capital from current year and previous year. The company's change in working capital from 2021 to 2025 is decreasing gradually signifies the higher in current liabilities compared to the current assets.

4.2.1.6 Cost of Goods Sold

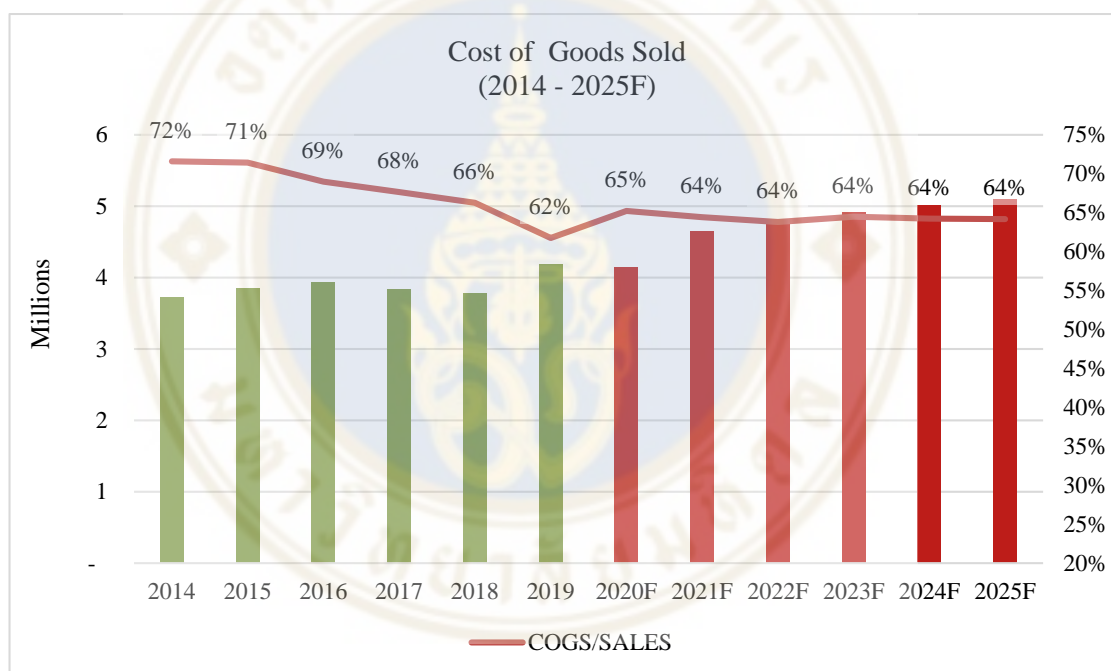


Figure 4.9 HaadThip Cost of Goods Sold Revolution

Source: HaadThip Public Company Limited (2020)

Cost of goods sold (COGS) is associated with the direct cost of the goods manufactured or acquired that the company sells within a period. The cost of goods sold estimated by using the percentage of sales. The COGS as a percentage of sales during 2021 to 2025 forecasts to maintain at 64% resulted from company's efforts to improve their operation efficiency such as the company projects to enhance worker's skills and encourage innovative ideas (HaadThip Public Company Limited, 2020).

4.2.1.7 Free Cash Flow to The Firm

Table 4.5 HaadThip's Free Cash Flow to The Firm Forecast

PERIOD	2015	2016	2017	2018	2019	0	1	2	3	4	5	Terminal Value
EBIT	134.8	288.4	339.5	300.1	501.3	489.60	572.62	633.15	600.87	631.88	648.37	
TAX	4.6	7.3	17.3	20.6	36.3	93.08	109.25	121.36	114.90	121.10	124.40	
EBIT AFTER TAX	130.1	281.1	322.2	279.5	465.0	396.53	463.37	511.79	485.97	510.77	523.97	
DEPRECIATION	194.9	230.6	261.5	273.6	278.2	267.59	283.29	294.68	301.84	307.93	314.35	
WORKING CAPITAL CHANGE	-80.1	-28.9	-13.2	-11.5	231.7	-111.25	38.96	21.61	18.72	16.05	14.36	
CAPEX	317.8	533.4	134.4	226.3	201.8	211.86	228.81	247.12	266.88	288.24	311.29	
CASHFLOW TO THE FIRM	87	7	463	338	310	564	479	538	502	514	513	8,388
EARNINGS PER SHARE (BT)	0.51	1.21	1.42	1.25	2.19	1.85	2.17	2.42	2.29	2.41	2.48	

The projected EBIT forecasts to increase from 501.3 million Baht in 2019 to 647.38 million Baht by 2025 with 4.4% 6 Years CAGR. The increase in EBIT is a result from an increase in sales and a reduction in cost of goods sold and operating expenses. The assumption is to maintain the ratio of selling expenses to revenue at 19.3% which aligned with the 5 years historical ratio. As the company is focusing on driving operational excellence by implementing stringent cost control and operational improvement initiatives such as Poonpin Solar Roof project. The assumption for the EBIT forecasts in 2021 to 2025 (after COVID-19) is based on successful initiatives during 2018-2019 including an improvement in production cost efficiency, less sugar recipe transformation, and a reduction in sales and marketing expenses altogether with a successful price adjustment initiative.

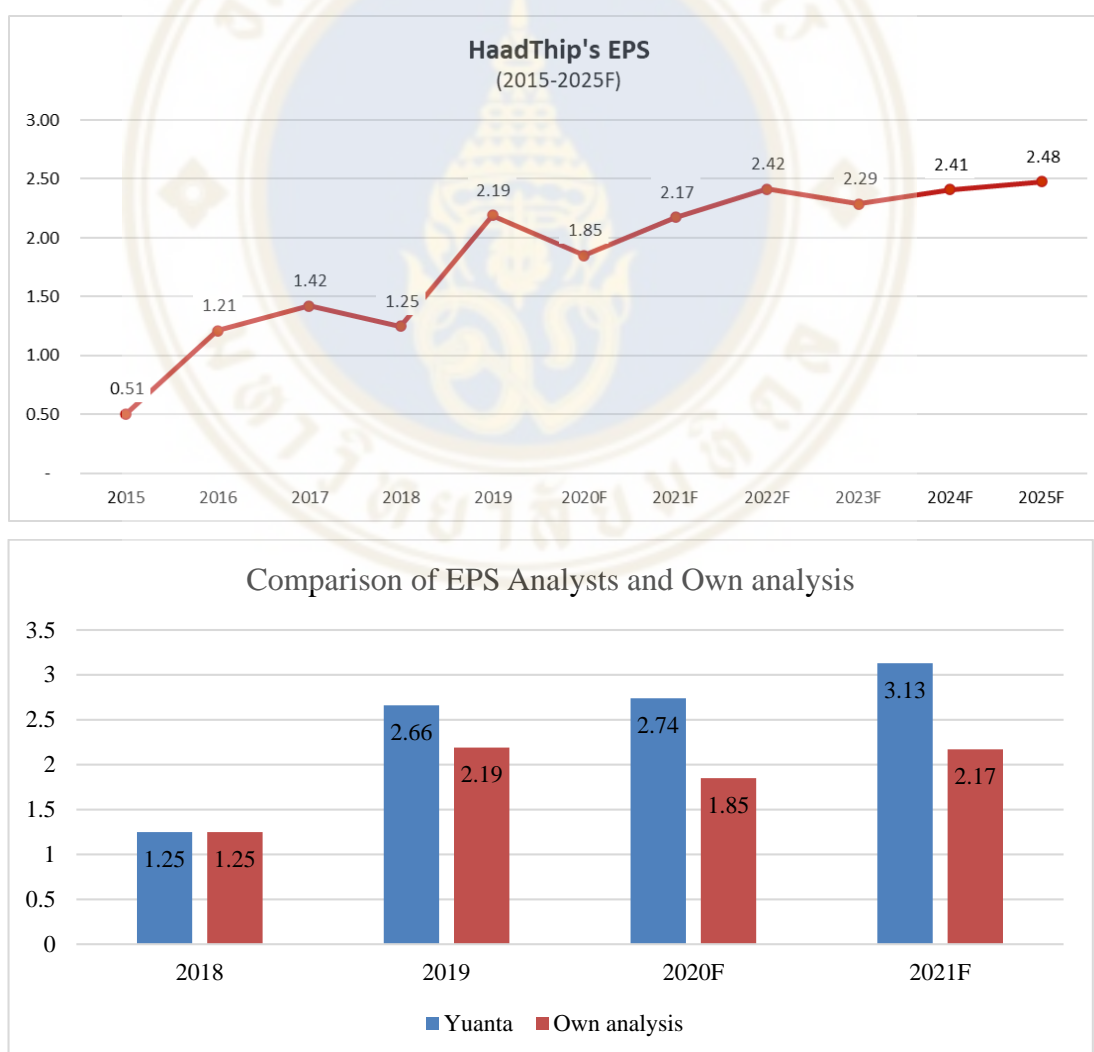


Figure 4.10 HaadThip's EPS Revolution

HaadThip's earnings per share is 2.19 Baht per share in 2019 and estimated to be reduced to 1.85 due to COVID-19 pandemic. However, the EPS forecasts to increase by 6% of 5-years CAGR afterwards. The increase in EPS is a result from an increase in net profit of the company, and a constant number of shares outstanding.

The EPS comparison between own analysis and analyst forecast during 2020 and 2021 shows 30% difference. As the analyst from SETTRADE forecast that the company will generate gradually increasing revenue during 2020 and 2021, the analyst assumes that the Southern Thailand will be open again for local tourists during 2020 and the foreigners will be starting to come back to the area during 2021, which seems to be optimistic (SETTRADE, 2020). While the assumption for our own analysis is on the conservative side in order to keep the analysis realistic.

4.2.2 Discounted Cash Flow Model (DCF)

$$\begin{aligned} \text{Value of firm} &= \sum_{t=1}^{\infty} \frac{\text{FCFF}_t}{(1 + \text{WACC})^t} \\ &= \frac{\text{FCFF}_1}{(1 + \text{WACC})^1} + \frac{\text{FCFF}_2}{(1 + \text{WACC})^2} + \dots + \frac{\text{FCFF}_n}{(1 + \text{WACC})^n} + \frac{\text{TV}}{(1 + \text{WACC})^n} \end{aligned}$$

Where:

FCFF _t	=	Cash Flow in the Period
WACC	=	Weighted Average Cost of Capital (Debt and Equity)
n	=	Period number
TV	=	Terminal Value

4.2.2.1 Calculation Free Cash Flow (FCF)

The discounted cash flow valuation for HaadThip company is based on free cash flow to firm valuation method, as this method referred to unlevered free cash flow where it includes debt and equity issued to all investors. Therefore, the discounted cash flow with unlevered free cash flow (Free Cash Flow to The Firm) is the method to identify the “enterprise value” (Hopefulbankerz, 2010).

4.2.2.2 Weighted Average Cost of Capital

In order to calculate the discounted free cash flow, it is crucial to identify the discount rate where weighted average cost of capital is employed to identify capital sources.

$$WACC = \left[k_d(1-T)\left(\frac{D}{D+E}\right) \right] + \left[k_e\left(\frac{D}{D+E}\right) \right]$$

Where:

WACC	=	Weighted Average Cost of Capital
D	=	Weight of Debt to Asset
E	=	Weight of Equity to Asset
Kd	=	Cost of Debt
Ke	=	Cost of Equity (Calculated with the CAPM)
T	=	Corporate Income Tax Rate

4.2.2.2.1 Cost of Equity

The cost of equity is the expected rate of return that investors require to obtain from an investment to the firm (Damodaran, n.d.), based on its risk.

In order to analyze the cost of equity, Capital Asset Pricing Model (CAPM) is employed:

$$R_e = R_f + \beta(R_m - R_f)$$

Where

R_e	=	Required Return on Equity (Cost of Equity)
R_f	=	Risk-free rate
Beta	=	Beta risk measure
R_m	=	Market Return
$(R_m - R_f)$	=	Equity Risk Premium

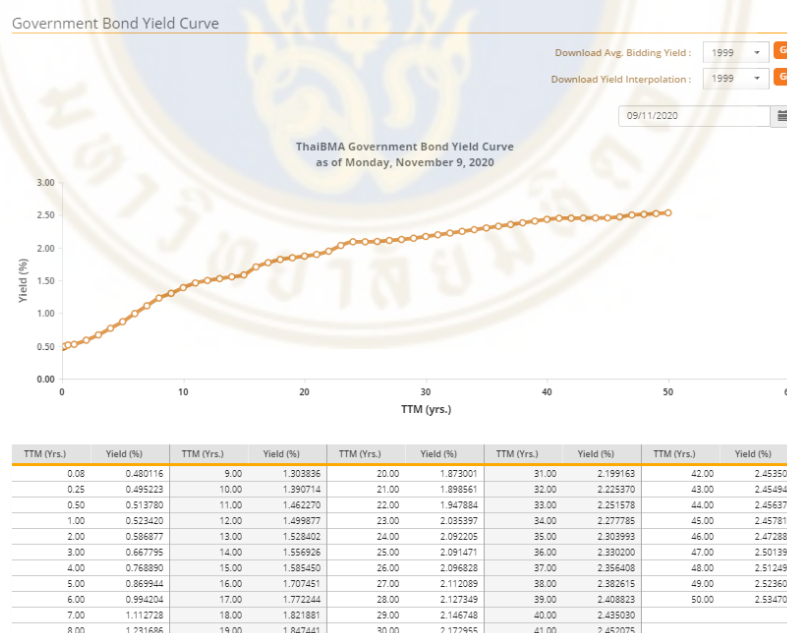
Table 4.6 Cost of Equity Factors

BETA	0.930
RISK FREE	1.391%
EQUITY RISK PREMIUM	7.58%
RQD. RETURN ON EQUITY	8.44%

By plugging in the estimates above, Haadthip's cost of equity is 8.44%. The rationale and calculation behind factors are discussed in the following session.

- Risk-Free rate

According to Damodaran (n.d.), "if the government has no dollar nominated bonds, the risk-free rate is be able to calculated from the ten-year government bond yield added by Sovereign CDS (Sovereign Credit Spread)" so, this approach would be the approach to calculate risk-free rate for HaadThip discounted cash flow valuation method (Damodaran, n.d.).

**Figure 4.11 ThaiBMA Government Bond Yield Curve**

The Ten-Years Thai Government bond yield at September 9, 2020 reported 1.39% of government bond yield. The Ten-Years Thai Government bond yield is considered as an investment without risks (Thai Bond Market Association, 2020). The risk-free rate of HaadThip is 1.39%.

- Beta (β)

Beta coefficient is a measure of the risk compared to the market. This report compares four methods of Beta calculation including:

Method 1: Covariance between the return of the stock and the market return index

This method measures sensitivity of the share price with the market index. The formula for beta is calculating the covariance between the 5 years historical return of HaadThip stock (r_{HTC}) and the five years historical market return index (r_m) is divided by the variance of the five years historical market return index (r_m) (Investopedia, 2020).

$$\beta_{HTC} = \frac{\text{Cov}(r_{HTC}, r_m)}{\text{Var}(r_m)}$$

Where

$$\begin{aligned} \beta_{HTC} &= \text{Beta coefficient of HTC} \\ r_m &= \text{Market return index} \\ r_{HTC} &= \text{Return of HaadThip stock} \end{aligned}$$

After finding the changeover period in SET index and the stock, the excel formula is applied to calculate covariance of market return and HTC stock return. The variance of the market is also calculated from excel. The beta of HTC is 0.374.

$$\begin{aligned} \beta_{HTC} &= \frac{\text{Cov}(r_{HTC}, r_m)}{\text{Var}(r_m)} \\ &= \frac{0.000872}{0.00233} = 0.374 \end{aligned}$$

Method 2: Linear Regression between the return of the stock and the market return index

This method presumes five years historical HTC stock return as a dependent variable and the market index return as an independent variable. The slope of the return of the stock and the market return index is analyzed by excel regression analysis resulting in HTC's Beta coefficient of 0.374.

Table 4.7 The Beta coefficient of HTC stock return

Regression Statistics	
Multiple R	0.179070506
R Square	0.032066246
Adjusted R Square	0.015377733
Standard Error	0.100069765
Observations	60

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.019241381	0.019241381	1.921456153	0.171002379
Residual	58	0.580809552	0.010013958		
Total	59	0.600050933			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.011389672	0.012924571	-0.881241773	0.381824323	-0.037261011	0.014481668	-0.037261011	0.014481668
X Variable 1	0.374028502	0.269829519	1.386165991	0.171002379	-0.166093963	0.914150968	-0.166093963	0.914150968

Method 3: Use Beta value from SETTRADE

Statistics		10/11/20	
P/E	15.43	PEG	1.82
P/BV	2.26	BVPS (Baht)	15.08
Par (Baht)	1.00	%Volume Turnover (YTD)	71.64
%Dividend Yield	5.16	%12M Dividend Yield	5.18
Market Cap. (M.Baht)	6,832.66	Dividend Payout Ratio	0.80
EV (M.Baht)	8,495.54	EV / EBITDA	10.55
Beta	0.64		

Figure 4.12 HTC's Beta from SET (The Stock Exchange of Thailand)

The Beta value is retrieved from the Stock Exchange of Thailand (SET) with the value of 0.64. “Beta is the volatility of a security compared to the market as a whole”, Beta is using in the calculation for Required Return to Equity in CAPM where the formula is shown below (Investopedia, n.d.).

$$\text{Expected Return} = \text{Risk - Free Rate} + (\text{Beta} \times \text{Market Risk Premium})$$

Method 4: Unlevered Beta to find Company’s levered beta

According to Damodaran, the unlevered beta is the measurement of volatility between the market return and the stock without financial leverage. This method is a bottom-up technique to take into account the business risk (Damodaran, n.d.). The unlevered beta has the formula as followed:

$$\text{Unlevered Beta} = \frac{\text{Levered Beta}}{\left[1 + (1 - \text{Tax Rate}) \times \frac{\text{Debt}}{\text{Equity}} \right]}$$

In order to estimate the beta of the firm by using unlevered beta, it is starting with a gathered beta of the comparable company that is in the NARTD (Non-Alcoholic Ready to Drink) market segment.

Table 4.8 HaadThip’s competitors

	D/E	EV/EBITDA	Beta
HTC	0.683522	7.7306129	0.47
SSC	0.419799	28.510831	0.42
SAPPE	0.244106	9.5286833	0.76
ICHI	0.235772	8.869592	1.52
TIPCO	0.707027	12.104489	1.31
Average	46%	13.348842	0.896

After that find the average D/E (Debt to Equity), EV/EBITDA, and BETA of the market in order to use as factors to calculate unlevered beta.

Table 4.9 Market unlevered beta

Tax	20%
D/E ratio	46%
Beta Levered	0.822
Beta Unlevered	0.601321
HTC Levered Beta	0.930134

By substituting all identified variables such as Tax, D/E ratio, and average beta levered from the market it resulted in the unlevered beta of 0.6013 for the NARTD market. The unlevered beta for the NARTD market is assumed that all the companies have similar operating leverage (Damodaran, n.d.).

$$\text{Unlevered Beta} = \frac{0.896}{[1 + (1 - 20\%) \times 0.46]} = 0.6013$$

Next, the most important step is to re-levered the HTC beta by using the NARTD beta from above calculation. Since HaadThip, Sermsuk, Sappe, Ishi, and Tipco are in the same industry and they are comparable, the formula for levered beta shown below (Damodaran, n.d.).

$$\text{Levered Beta} = \text{Unlevered Beta} \times \left[1 + (1 - \text{Tax Rate}) \times \frac{\text{Debt}_{\text{HTC}}}{\text{Equity}_{\text{HTC}}} \right]$$

$$\text{Levered Beta} = 0.6013 \times [1 + (1 - 20\%) \times 68.35\%]$$

Table 4.10 HTC levered beta

Tax	20%
D/E ratio	46%
Beta Levered	0.822
Beta Unlevered	0.601321
HTC Levered Beta	0.930134

By substituting all identified variables such as Tax, D/E ratio, and the unlevered beta of 0.6013 for NARTD market, results in HaadThip's levered beta of 0.93.

Out of 4 identified methods of the beta calculation, this report will be based on method 4 which the HTC's levered beta is 0.934, since the levered beta emphasizes the overall debt and company performance moreover, it takes the comparable firms' risks into account and excluding irrelevant type of industries (Damodaran, n.d.).

- Equity Risk Premium

Table 4.11 Thailand Equity risk premium

Country	Moody's rating	Default Spread	Country Risk Premium	Equity Risk Premium
Thailand	Baa1	1.87%	2.35%	7.58%

The Equity risk premium for Thailand is retrieved Damodaran and is 7.58% (Damodaran, 2020).

4.2.2.2.2 Weight of Debt

According to Damodaran, as the calculation purpose is to use in computing the cost of capital for the firm therefore by using net debt, the calculation will consider both short-term and long-term borrowing debt. The assumption of using net debt are assuming cash and debt have similar risk where this will lead to the overstate value of riskier firms. By choosing net debt in calculation seems to be conservative, rather than using gross debt as includes operating leases.

Therefore, Haadthip's weight of debt is 8% derived from the following calculation.

$$\text{Weight of Debt} = \frac{\text{Net Debt}}{(\text{Net Debt} + \text{Equity})}$$

Where

Net Debt = Interest bearing Debt-Cash and Near Cash

Equity = Number of Shares x Share Price

Table 4.12 Weight of Debt

As of 9-11-2020

Share price	36.25
# Shares (Mn)	201
Equity Value (BtMn)	7,285
Net Debt (BtMn)	634
NET DEBT / (EQUITY + NET DEBT)	8%

4.2.2.2.3 Cost of Debt

After Tax Cost of Debt = Total Interest Rate x (1-Tax)

Tax	20.0%
Cost of BEBT	3.5%
After Tax Cost of BEBT	2.8%

Therefore, HaadThip's cost of debt is 2.8% derived from the above formula.

4.2.2.3.4 Weight of Equity

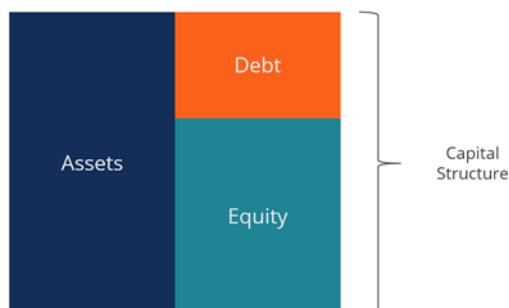


Figure 4.13 Capital Structure

Table 4.13 Weight of Equity

Share price	36.25
# Shares (Mn)	201
Equity Value (BtMn)	7,285
Net Debt (BtMn)	634
NET DEBT / (EQUITY + NET DEBT)	8.00%
Weight of Equity	92.00%

Haadthip's weight of equity is 92%.

4.2.2.3.5 Capital Structure

According to Corporate Finance Institute, the company's cost of capital is taking both cost of equity and cost of debt into account, as illustrated in the following figure (Corporate Finance Institute, 2020).

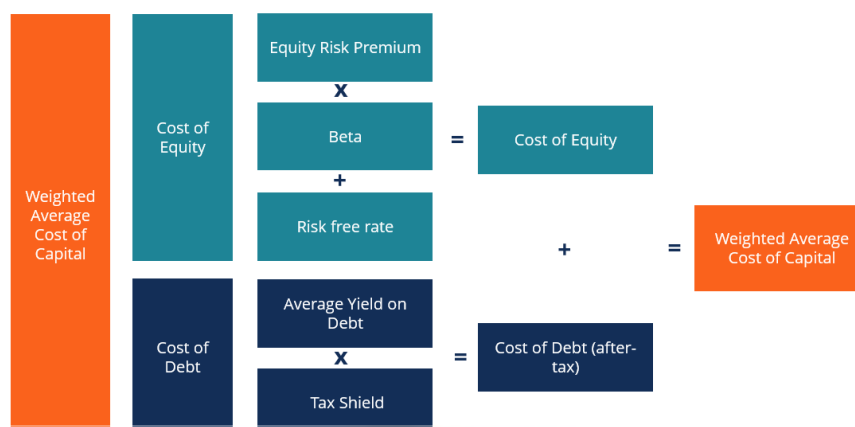


Figure 4.14 Weighted Average Cost of Capital Formula

Source: Corporate Finance Institute (2020)

$$WACC = \left[k_d(1-T)\left(\frac{D}{D+E}\right) \right] + \left[k_e\left(\frac{D}{D+E}\right) \right]$$

Table 4.14 WACC

	%
TAX	20.0%
COST OF DEBT	3.5%
# Shares (Mn)	200.9605
Equity Value (BtMn)	7284.818125
WEIGHT OF DEBT	8.0%
WEIGHT OF EQUITY	92.0%
AFTER TAX COST OF DEBT	2.8%
COST OF EQUITY	8.44%
WACC	7.99%

The weighted average cost of capital for determining expected free cash flow for HaadThip present value is 7.99%, derived from the WACC formula.

4.2.3 Terminal Value

The terminal value is the value of the firm assuming the business will continue to generate cash flows perpetually. The terminal value is projected after the end of the forecasted period with a constant growth rate (Damodaran, n.d.). According to Damodaran's assumption, the perpetual growth of a company is unable to be larger than the growth of the country (Damodaran, n.d.). HaadThip company is mainly distributing their products domestically within Southern Thailand where the company has been contracted with the main Coca-Cola company. From this information, the perpetual growth rate in the long run for Haadthip is 1.39% which is the same as the risk-free rate since it takes inflation, currency risk and the real interest rate into account.

$$\text{Risk-free rate} = \text{Expected Inflation} + \text{Expected real interest rate}$$

The risk-free rate reflects the actual growth of the economy. By using risk-free rate for perpetual growth, it is assumed to be conservative and increase consistency in the valuation as there is information supported with no biases from analysts (Damodaran, 2020).

The terminal value is calculated from the projected free cash flow to the firm of 2025 multiplied by perpetual growth rate assuming the company will operate forever then discounting with weighted average cost of capital less perpetual growth rate resulted in 13,917 Million Baht.

The terminal in Unlevered discounted cash flow (UFCFF) method

$$\text{Terminal Value (TV)} = \frac{\text{Final Year UFCF} \times (1 + \text{Terminal UFCF Growth Rate})}{\text{WACC} - \text{Terminal UFCF Growth Rate}}$$

Where:

Terminal Value = The projected future cash flows assuming a company will grow at a constant growth rate perpetually.

WACC = Weighted Average Cost of Capital

4.2.4 DCF Valuation Result

4.2.4.1 DCF Result

Following the assumption and the model of Discounted Cash Flow method to determine HaadThip's present value from 2020 to 2025 with the present value of terminal free cash flow.

The free cash flow to the firm is calculated by the following formula.

$$\begin{aligned} \text{Free Cash Flow to The Firm} = & \text{EBIT after tax} + \text{Depreciation} \\ & + \text{Change in Working Capital} - \text{CAPEX} \end{aligned}$$



Table 4.15 DCF Result

PERIOD											Terminal Value	
	2015	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2024F		2025F
EBIT	134.75	288.41	339.55	300.05	501.33	489.60	572.62	633.15	600.87	631.88	648.37	
TAX	4.63	7.28	17.34	20.57	36.34	93.08	109.25	121.36	114.90	121.10	124.40	
EBIT AFTER TAX	130.12	281.12	322.21	279.49	464.99	396.53	463.37	511.79	485.97	510.77	523.97	
DEPRECIATION	194.90	230.57	261.54	273.64	278.19	267.59	283.29	294.68	301.84	307.93	314.35	
WORKING CAPITAL CHANGE	-80.08	-28.95	-13.22	-11.45	231.74	-111.25	38.96	21.61	18.72	16.05	14.36	
CAPEX	317.75	533.38	134.37	226.26	201.77	211.86	228.81	247.12	266.88	288.24	311.29	
CASHFLOW TO THE FIRM	87	7	463	338	310	564	479	538	502	514	513	8,388
EARNINGS PER SHARE (BT)	0.51	1.21	1.42	1.25	2.19	1.85	2.17	2.42	2.29	2.41	2.48	
DISCOUNTED CASHFLOW						564	443	461	399	378	349	5,712

	31-Dec-20
PV OF FIRM VALUE (Unlevered FCFF)	8,306
NET DEBT	634
PV OF EQUITY VALUE	7,672
No. OF SHARES (MN)	201
EST. SHARE VALUE	38.18

With the discounted rate from the weighted average cost of capital (WACC) at 7.99%, the UFCFF is 8,306 Million Baht. The value of equity is calculated as the UFCFF subtracted by the net debt value, resulting in 8,306 Million Baht. The equity value per share of the company from the DCF method is 38.18 Baht/Share.

4.2.4.2 Implied Cost of Capital

According to SET, Market capitalization is the value of the firm calculated by the stock price multiplied by the number outstanding shares. The top firm with the top 30 ranking by a market capitalization above \$10 billion is considered a large market capitalization (SET, n.d.). HaadThip company has the current market capitalization of 6.88 Billion Baht which is the mid-market capitalization.

Statistics	Accumulated: Turnover Ratio, Value Trade/Day		
	YTD 02 Dec 2020	2019 30 Dec 2019	2018 28 Dec 2018
Listed share (M.)	200.96	200.96	199.22
Market Cap (MB.)	6,882.90	4,561.80	2,769.13
Price (B./share)	34.25	22.70	13.90
BVPS (B./Share)	15.13	14.49	13.37
P/BV (X)	2.26	1.58	1.04
P/E (X)	13.52	9.84	10.89
Turnover Ratio (%)	80.82	55.66	57.81
Value Trade/Day (MB.)	19.30	9.25	11.16
Beta	0.64	0.47	0.94

Figure 4.15 HaadThip's Company Data

The HTC current share price on November 9, 2020 is 36.00 Baht. With the terminal growth of 1.39% and the constant of after-tax cost of debt is 2.8%, the implied WACC that gives the current market price of 36.00 Baht is 8.65%.

Table 4.16 Implied WACC

Implied WACC	8.65%
Equity Weight	92%
Debt Weight	8%
After Tax cost of debt	2.80%
Cost of Equity	9.158%
Share price	36.00 Current (9 Nov 2020)

Next, the implied cost of equity is calculated by substitute 4 parameters including the implied WACC, Weight of equity, weight of debt, and after-tax cost of debt into the WACC equation as shown below.

$$\text{WACC} = \left[k_d(1-T)\left(\frac{D}{D+E}\right) \right] + \left[k_e\left(\frac{D}{D+E}\right) \right]$$

$$8.65\% = 8\%(2.8\%) + 92\%(\text{Cost of Equity})$$

$$\text{Cost of Equity} = 9.158\%$$

By solving the WACC equation for the implied cost of equity, it is resulting in 8.65% which is higher than using CAPM formula which gave the value of 7.99%.

4.2.5 Target Price

Table 4.17 DCF Target Price

	31-Dec-20
PV OF FIRM VALUE (Unlevered FCFF)	8,306
NET DEBT	634
PV OF EQUITY VALUE	7,672
No. OF SHARES (MN)	201
EST. SHARE VALUE	38.18

By using the discounted cash flow with unlevered free cash flow to evaluate the company's intrinsic value, HaadThip company has the target price of 38.18 Baht.

From the discounted cash flow valuation shows the HTC share price is 38.18 while the current market price of 36.00 Baht as of November 9, 2020, this valuation indicates that the HTC market price is undervalued.

4.3 Sensitivity Analysis

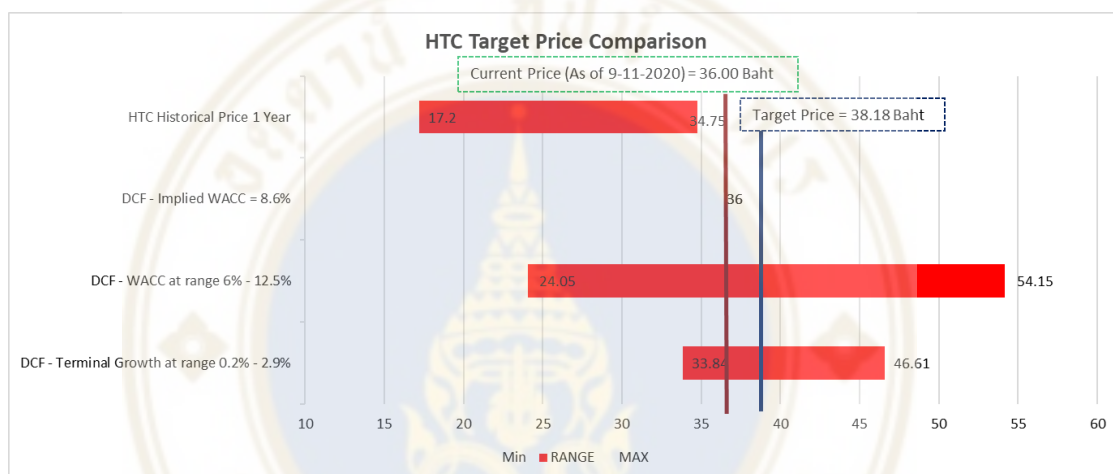


Figure 4.16 HTC Football Field

HaadThip's sensitivity analysis shown in the above figure is conducted from the three approaches including 1 Year Historical Price, Discounted Cash flow with adjusted WACC, and Discounted Cash flow with adjusted Terminal Growth.

4.3.1 Sensitivity analysis of terminal growth rate to target price

Table 4.18 Sensitivity Analysis of Terminal Growth Rate to Target Price

Terminal Growth	Share Price
0.2%	33.84
0.5%	34.80
0.8%	35.85
1.1%	36.98
1.4%	38.18
1.7%	39.58
2.0%	41.07
2.3%	42.72
2.6%	44.56
2.9%	46.61

The table shows a sensitivity analysis based on an increasing terminal growth by 0.3%, while keeping the terminal growth rate constant at 1.39%, in order to see the range of possible share prices. As the terminal growth increases by 0.3%, the higher the share value.

4.3.2 Sensitivity analysis of terminal WACC to target price

Table 4.19 Sensitivity Analysis of Terminal WACC to Target Price

WACC	Share Price
6.0%	54.15
6.5%	48.97
7.0%	44.72
7.5%	41.15
8.0%	38.18

Table 4.19 Sensitivity Analysis of Terminal WACC to Target Price (cont.)

WACC	Share Price
8.5%	35.51
9.0%	33.24
9.5%	31.24
10.0%	29.48
10.5%	27.90
11.0%	26.48
12.0%	24.05

The table shows a sensitivity analysis based on an increasing WACC by steps of 0.5%, while keeping the terminal growth rate constant at 1.39%, in order to see the range of possible share prices. As the WACC increases by 0.5%, the lower the share price.

Table 4.20 Sensitivity Analysis of WACC and Perpetual Growth

	Base	WACC													
		4.72%	5.24%	5.82%	6.47%	7.19%	7.99%	8.79%	9.67%	10.63%	11.70%	12.87%			
Perpetual growth	38.18	4.72%	5.24%	5.82%	6.47%	7.19%	7.99%	8.79%	9.67%	10.63%	11.70%	12.87%			
	0.82%	65.13	57.57	51.01	45.30	40.31	35.92	32.40	29.26	26.44	23.90	21.62			
	0.91%	66.44	58.56	51.77	45.88	40.75	36.26	32.67	29.46	26.60	24.03	21.72			
	1.01%	67.96	59.71	52.64	46.54	41.25	36.64	32.97	29.70	26.78	24.17	21.83			
	1.13%	69.76	61.06	53.65	47.31	41.83	37.08	33.31	29.97	26.99	24.34	21.96			
	1.25%	71.89	62.64	54.84	48.20	42.51	37.59	33.71	30.27	27.23	24.52	22.10			
	1.39%	74.44	64.52	56.23	49.24	43.28	38.18	34.16	30.63	27.50	24.73	22.27			
	1.53%	77.22	66.54	57.72	50.34	44.10	38.79	34.63	30.99	27.78	24.95	22.43			
	1.68%	80.57	68.95	59.46	51.62	45.05	39.49	35.17	31.41	28.10	25.20	22.62			
	1.85%	84.67	71.84	61.54	53.13	46.15	40.31	35.79	31.88	28.47	25.48	22.84			
	2.04%	89.77	75.38	64.04	54.92	47.45	41.26	36.51	32.43	28.89	25.79	23.08			
	2.24%	96.26	79.77	67.09	57.07	48.99	42.37	37.35	33.06	29.37	26.16	23.36			

The above table is illustrating the change in target share price based on the effect of two variables including WACC and terminal growth rate, as each of the two variables changes stepwise by 10%. The table shows the impact on the company's target price. From the sensitivity analysis table above reflects the effect of WACC and terminal growth to the share price, the WACC should not be higher than 7.99% and the terminal growth should not be lower than 0.9% in order to keep share price higher than the market price.



CHAPTER V

INVESTMENT RISK

HaadThip Public Company Limited (HTC) is a non-alcohol beverages manufacturer and distributor in the southern provinces of Thailand. The company has a monopoly right to supply Coca-Cola beverages to 14 provinces include Chumphon, Ranong, Yala, Krabi, Phuket, Phang-nga, Trang, Phatthalung, Surat Thani, Nakhon Si Thammarat, Songkhla, Satun, Pattani, and Narathiwat. The food and beverage stocks are considered to be the defensive stocks as the demand of these products is constant and gradually increasing year over year, in line with the population growth rate. Beverages are the products that the consumer tends to buy regardless of economic conditions (Investing, 2020). However, there are still some risks to be considered including market risks, natural risks, operational risks, and regulatory and legal risks explained in the following section.

Impact

High	- License - Natural Risks	- Regulatory and legal risks	- Consumer preferences
Medium			
Low			- Raw Material - Limited Market
	Low	Medium	High

Likelihood

Figure 5.1 Risk Matrix

5.1 Market Risk

5.1.1 Limited Market

Market expansion is limited because the company's sales area is limited to 14 southern provinces and its main competitors can distribute products across the country. As a result, the size of the business varies widely between competitors, allowing larger competitors to produce at lower unit prices and therefore generate additional funding for marketing campaigns.

5.1.2 Risk Resulting from Changes in Consumer Preference:

Health-Conscious

The preferences of consumers have shifted to be more health-conscious. Nowadays, the consumers are seeking a healthy lifestyle and trying to avoid the food and beverages that could be harmful to their health in the long run. The preference for the beverage is shifting to healthy beverages such as milk, juice, mineral water, green tea, etc. Healthy lifestyle makes people's focus on their health and reduces their consumption of foods and drinks that are considered harmful to health. According to Felman, "People consider sugary drinks to be a significant contributor to many health conditions, including obesity, type 2 diabetes, and tooth decay. Research has shown that drinking a can of Coca-Cola can have damaging effects on the body within an hour" (Felman, 2019). This shows the negative correlation between wellness and Coke consumption, the higher the consumption resulted in the higher dangerous effect to health.

5.1.3 Packaging

The consumer packaging preferences change from returnable glass bottles (RGB) to non-returnable packages such as PET bottles or cans due to its feature being portable and more convenient. According to the company's annual report, the returnable glass bottles (RGB) can generate more profits than the non-returnable packages (HaadThip, 2020). The products are sold through traditional trade such as food shops and provision shops where it contributed 20% of HaadThip revenues. Along with the increase in convenience stores and supermarkets it resulted in cannibalization of the returnable glass bottles (RGB) by non-returnable packages.

5.2 Operation risks

5.2.1 Raw material

The low quality of purchased incoming materials is one of the risks for HaadThip as the company is required to comply with Coca-Cola standards. The company would like to reduce raw material such as syrups in order to increase product margins. This risk has a strong link to the company's procurement process. The risks of procuring low quality products affecting the Coca-Cola standards and a higher rate of rejected products from customers. Consequently, the company will have to bear the operation cost from this rejection or penalty fees that might be applied by customers as the company is unable to deliver its product on-time in full.

5.2.2 License

The licensing risk is one of the most important risks to HaadThip as the company is the sole manufacturer and distributor of Coca-Cola products. The licensing term is renewed every five years. The risks from Coca-Cola main company not granting the right to produce and distribute or terminate the contracts would affect the survival of the company.

5.3 Regulatory and legal risks

5.3.1 Price

Carbonated beverages are a type of product that the Department of Internal Trade, Ministry of Commerce closely monitors and has a criterion for adjustment price. The price control will directly impact the beverage industry performance, especially increasing prices.

5.4 Environmental Risks

5.4.1 COVID-19 Pandemic

Even though the food and beverage industry is less volatile compared to others. However, the COVID-19 pandemic still has a major impact on HaadThip as the company's distribution channels especially in HORECA (Hotel, Restaurant, and Catering) since the southern area of Thailand which is in a tourist destination. As the majority of the countries lifted up its rules and regulation to control people travelling resulted in reduction of tourists drastically. The HaadThip sales in 2020 and 2021 are likely to drop as the number of tourists is drastically lower.

5.4.2 Natural Disaster

Natural disasters such as flooding and landslides increase the transportation risks to the company. The geography of the southern area connects with Pacific Ocean where it is one of the most prone to flood. Flooding and landslide are affecting the company as it might destroy company fixed assets resulting in higher operating maintenance and capital expenditure expenses. In addition, if the distribution channels are destroyed there would be no product orders resulting in reduction in sales.

CHAPTER VI

CONCLUSION

6.1 Investment Recommendation

This thematic paper is providing an evaluation of HaadThip Public Company Limited based on the Discounted Cash Flow valuation method. The Discounted Cash Flow (DCF) valuation method identifies the enterprise value of the company after making assumptions about the company's earning, perpetual growth rate, cost of debt, and cost of equity, and then discounting the forecasted cash flows to the present value.

This paper estimates HTC's share price based on the DCF method with a projection period of 2020 to 2025 and under the assumption that the company will grow forever at a low constant rate after that. The unlevered beta is calculated as the measurement of volatility between the market return and the stock without financial leverage in order to take into account the business risk. The method applied to the industry beta of stocks in the same segment resulted in a HTC beta of 0.934. The valuation in this thematic paper is based on the estimated cost of equity of 8.44% with the weight of 92%, the 3.5% cost of debt with the weight of 8%, resulting in a WACC of 7.99%.

HaadThip company has a market capitalization of 6.88 Billion, considered as a mid-market capitalization stock. Another approach to estimate HTC target price is using the implied WACC. With the terminal growth of 1.39% and the constant of after-tax cost of debt at 2.8%, the implied WACC that gives the current market price of 36.00 Baht is 8.65%. From this method, the implied WACC of 8.65% is used to recalculate the cost of equity, resulting in 9.2%. The cost of equity is derived from risk-free rate added by the risk premium. The equity risk premium reported from Damodaran is 7.58% while the risk-free rate from 10 Years government bond as of 11 September 2020 is 1.39%. From this information, an implied 9.2% cost of equity seems to be conservative.

For the sensitivity analysis, we take WACC and perpetual growth into account to generate the possible intrinsic values at specific WACC and perpetual growth range from 24.05 to 54.15 Baht per share. As the WACC becomes higher, the stock price decreases. At 7.99% WACC and 0.2% to 1.1% of perpetual growth resulted in a lower estimate stock value compared to the current market price of 36.00 as of November 9, 2020.

By comparing the target price of 38.18 Baht per share with the current market price of 36.00 indicates 5.71% upside. The recommendation from the DCF suggests an investor to “BUY” this stock since it is undervalued when compared to the current market price of 36.00 as of November 9, 2020.

6.2 Triggers for reassessment

Damodaran (n.d.) studied there are three significant factors for the Discounted Cash Flows valuation method including perpetual growth rate and the Weighted Average Cost of Capital (WACC), and future cash flows.

The Discounted Cash Flows method is influenced by many assumptions, whether controllable factors like capital structure policy or uncontrollable factors like the economy. The method is considered to be sensitive to these factors.

The triggers for reassessment of the DCF method that the analyst needs to be aware of are as follows:

6.2.1 Growth in Assets

The DCF valuation needs to reassess if there are investments occurred such as the capital expenditure investment, mergers, and acquisitions, as these investments will affect the terminal value of the company.

Moreover, if there are some changes in the company’s business model, the DCF valuation needs to be reassessed, as the change will affect the revenue from the operations and may result in a change in the cash flows.

6.2.2 Tax Rate

The cost of debt is another important factor for the DCF valuation. It takes interest expenses and tax rate into account. If there is a change in taxation announced by the government or a change in the interest rate, it is crucial to reassess the DCF valuation as it affects the net profits and discount rate.

6.2.3 The Cost of Equity

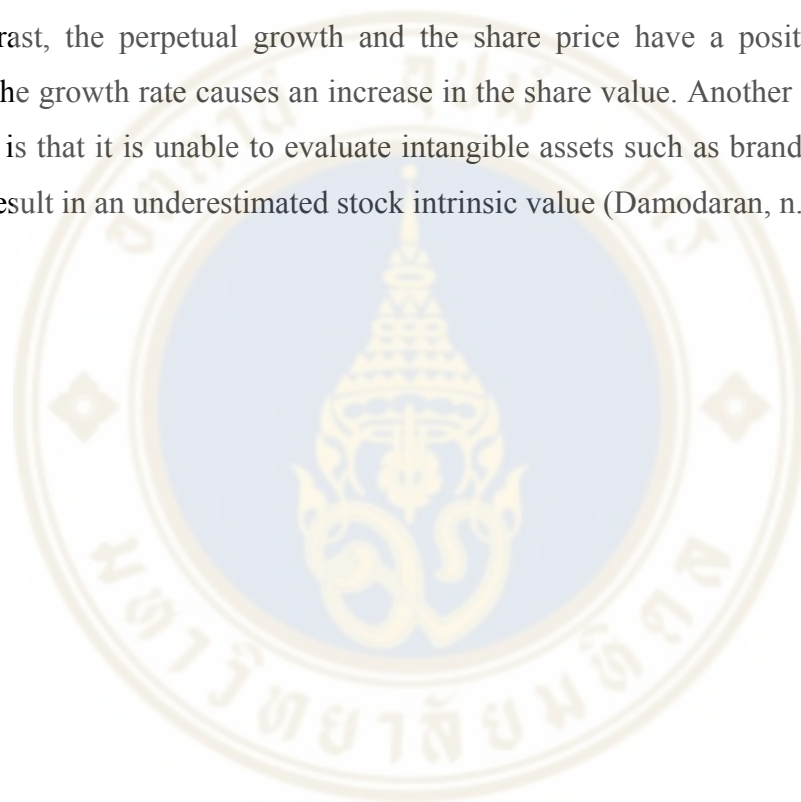
HaadThip's major shareholder is the Rattakul's group, owned by the founder of the company, which holds 30.5% of total shares. The cost of equity is another important factor for the analyst to be aware of if there is a change in shareholders' structure it will affect the weight of the cost of equity that is a factor to calculate the discount rate. Thus, the valuation should be re-assessed if there is significant change in the shareholder structure.

6.2.4 Projected Growth in Sales

The projected growth in sales depends on the company's sales activity, economic conditions, market competition, company strategies, and the company's pricing policy (Corporatefinanceinstitute, 2019). Therefore, the key trigger for reassessing the valuation for projected growth in sales are those mentioned four factors. The economic condition should be reassessed every quarter by using updated information from the National Economic and Social Development Board (NESDB). The market competition, the company's strategies, and the company's pricing policy are the factors that required attention as well, by following the company's publications and news. HaadThip has a share of 83.9% of the Non-Alcoholic Ready to Drink (NARTD) market in the Southern Thailand region, the valuation needs to be reassessed once there is a change in market share which might result from changes in consumer preferences. The company's pricing policy is regulated by the Coca-Cola Company and the board of directors of the company, if there is a change or announcement, it signals that the valuation needs to be reassessed.

6.3 Limitations

Damodaran (N.D.) argues there are three significant factors for the Discounted Cash Flow valuation method including perpetual growth rate and the Weighted Average Cost of Capital (WACC), and future cash flows. The Discounted Cash Flows method requires an analyst to make concrete unbiased assumptions for all those three inputs in order to correctly assess the intrinsic value. The Discounted Cash Flows valuation is especially sensitive to the perpetual growth rate and the discount rate. According to the sensitivity analysis, the higher the discount rate is, the lower the estimated share price. In contrast, the perpetual growth and the share price have a positive relation, the higher the growth rate causes an increase in the share value. Another weakness of this method is that it is unable to evaluate intangible assets such as brand values, and this might result in an underestimated stock intrinsic value (Damodaran, n.d.).



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