

**DISCOUNTED CASH FLOW VALUATION OF HAADTHIP
PUBLIC COMPANY LIMITED**



**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
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entitled
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HAADTHIP PUBLIC COMPANY LIMITED**

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DISCOUNTED CASH FLOW VALUATION OF HAADTHIP PUBLIC COMPANY LIMITED

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ABSTRACT

This thematic paper applied the discounted cash flow valuation (DCF) approach to assess the intrinsic value of HaadThip Public Company Limited (HTC), which represent the concept of forecasting the expected cash flows and using net present value to discount the cash flow, taking the time value of money into the analysis. The DCF approach relates to estimating the company value by considering the assumptions to forecast future events, including the company financial analysis, macro analysis, industry analysis, competition analysis, and share price valuation. HaadThip Public Company Limited (HTC) is a producer of non-alcoholic beverages. It has also been given Coca-Cola franchise status for 14 provinces in southern Thailand. This paper evaluates HaadThip's company value by forecasting the future cash flow and share value based on quotable presumption. Therefore, the answer from the analysis shows the target price of Haadthip company overvalued when compared to the current market price with the suggestion to "BUY".

KEY WORDS: HTC/ Discounted Cash Flow Valuation/ Soft drink/ NARTD

42 pages

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CHAPTER I

INTRODUCTION

Coca-Cola Company (USA), Atlanta, Georgia, has authorized HaadThip Public Company Limited (HTC) to manufacture and supply sparkling drinks under trademarks including "Coca-Cola," "Fanta," and "Sprite," in addition to Coca-Cola Company products such as Minute Maid, Namthip drinking water, and "Bon Aqua" 100% natural mineral water. With two plants in Amphoe Haad Yai, Songkhla, and Amphoe Poonpin, Surat Thani, the business supplies goods to 14 provinces throughout southern Thailand comprising Ranong, Yala, Krabi, Phuket, Trang, Phang-nga, Phatthalung, Surat Thani, Nakhon Si Thammarat, Songkhla, Satun, Pattani, and Narathiwat.

HTC has a five-year contract extension deal with Coca-Cola (USA). The current contract runs from January 1, 2019 through December 31, 2023. The organisation's market share is 83% or 25.9% in NARTD (Non-Alcoholic Ready to Drink) in the sparkling market in southern Thailand. HTC's shareholder structure divides shares by nationality, with Thai shareholders holding 73.40% and foreign shareholders holding 26.60% (HTC annual report, 2020). In addition, the company's dividend policy is to disburse dividends at between 50% and 80% of the residual Net Profits after subtracting all reserves required by law and regulated by HTC (HTC annual report, 2020).

Thailand's soft drink business is monopolistic by design. The acquisition of equipment, the development of interest, as well as the establishment of buildings including supply depots, besides sales and delivery vehicles, are all regarded as challenging for a new company to start business.

ThaiNamthip Ltd., a maker and provider of Coca - Cola products in the 14 southern provinces covered by HTC, Pepsi - Cola (Thai) Trading Company Limited, a maker and provider of "Pepsi", Serm Suk Public Company Limited (SSC), a maker and provider of "Est Cola", and AJE THAI Co., Ltd., a maker and provider of Big Cola, as

well as 2 to 3 other smaller organisations, comprise the major rivals in Thailand's soft drink sector.

HTC's earnings amid the COVID-19 pandemic was THB 6,425.42 million in 2020, down THB 350.08 million or 5.17%, with total sales of 59.5 million unit-cases, down 7.2% from 64.1 million unit-cases in 2019. The major cause was a decrease in total beverage consumption due to the outbreak. Nonetheless, commercial and market performance operations enabled the business to increase its NARTD value share from 24.8% to 25.9% (HTC annual report, 2020)

Based on the Bank of Thailand's (BOT) anticipated GDP growth for this year to 0.70%, resulted from the third wave of Covid-19 outbreak has a severe impact on the country's economy. HTC earnings are expected to rise at a rate of 0.70% from 2021 to 2025 (BOT, 2021)The COVID-19 situation in Thailand is thought to be a reflection of this prediction. The south of Thailand is still regarded as a "Wonder Tourist Destination." The Royal Thai Government has formally authorised steps to reopen Phuket to fully vaccinated overseas travellers without quarantine procedures, known as the "Phuket Sandbox," starting July 1, 2021. From July 15, 2021, overseas visitors will be allowed to visit Koh Samui, Koh Phangan, and Koh Tao without having to go through quarantine. This campaign will have the effect of encouraging international visitors to return to Thailand's south, as well as helping to preserve the country's devastated economy, particularly the HORECA (Hotels, Restaurants, and Catering) industry. HORECA is one of HTC's target markets, and it is obvious that this is an opportunity for the firm to improve its productivity, as the company expects to see a favourable trend from tourist recovery, in addition to the new sales and advertising strategy.

Regarding the discounted cash flow (DCF) method, HTC's share price with a forecast period of 2021 to 2025, and under the assumption that the company's sales revenue will grow along with DGP growth. Due to the stock is undervalued compared to the current market price of 34.50 Baht as of 6 August 2021. The target share price from the DCF method is 38.90 Baht per share. The recommendation from the discounted cash flow (DCF) method suggests an investor "BUY."

CHAPTER II

WHO IS HAADTHIP (HTC)?

2.1 What Is Haadthip (Htc) Does

HaadThip Public Company Limited (HTC) is a producer of non-alcoholic beverages. It has also been given Coca-Cola franchise status for 14 provinces in southern Thailand, from Chumporn to the Malaysian border (comprising 10 million people, accounting for 15% of the total population of Thailand (HTC's profile, Haadthip, 2021) Hatyai, Songkla is the company's headquarters, with executive offices in Bangkok. Beginning in 1969 under the name "Nakornthip," the firm has a lengthy history (almost 50 years), until changing its name to "HAADTHIP" in 1978. As indicated in the milestones in **Figure 2.1**, the firm was originally listed in the SET in 1988.

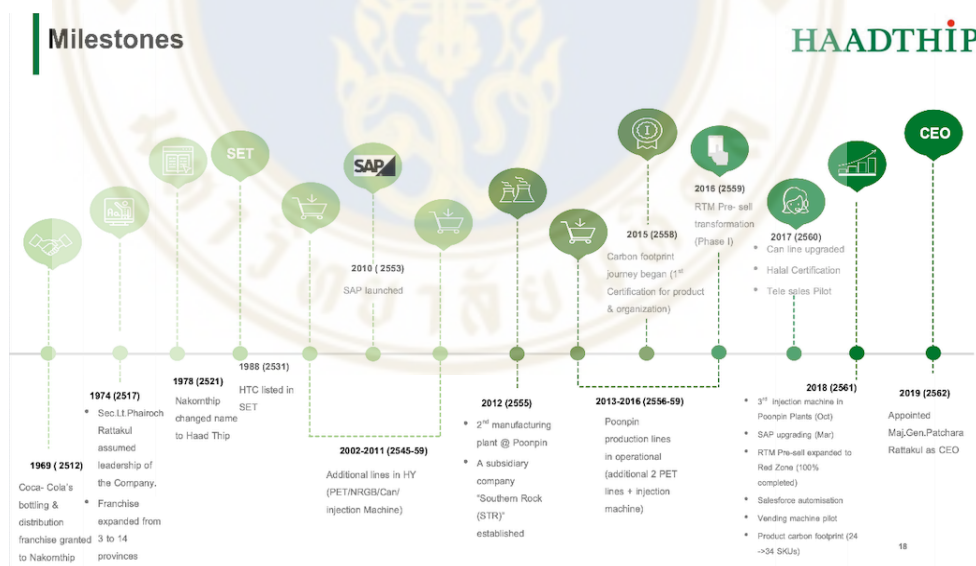


Figure 2.1 HAADTHIP Milestones

Source: (HTC's profile, Milestones, 2021)

HAADTHIP

HaadThip Public Company Limited (HTC) purpose, philosophy, value, mission, and vision 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” (HTC's profile, Haadthip, 2021).

Philosophy

“HTC philosophy is a perfect blend between Western and Eastern management characteristics” (HTC's profile, Haadthip, 2021)

Value

“HTC will create an organizational culture on the foundation of the including 10 values: Integrity, Individual Initiative, Customer Value, Teamwork, People Development, Mutual Trust & Respect, Commitment, Always be part of the South, Relationship Marketing, Fun” (HTC's profile, Haadthip, 2021)

Vision

“We are the leader in the beverage industry and committed to sustainable growth with the communities (HTC's profile, HTC Vision and Mission, 2021)

Mission



“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” (HTC's profile, HTC Vision and Mission, 2021)



“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” (HTC's profile, HTC Vision and Mission, 2021)



“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” (HTC's profile, HTC Vision and Mission, 2021)



“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” (HTC's profile, HTC Vision and Mission, 2021)

HTC's 10 brands, 163 SKUs, and 34 pack sizes (HTC annual report, 2020) are allocated into two categories: carbonated beverages (Coca-Cola, Fanta, Sprite, Schweppes, and A&W) (see **Figure 2.2**), and non-carbonated beverages (Minute Maid, Fuze Tea, Namthip, and Bon aqua) (see **Figure 2.3**).



Figure 2.2 HAADTHIP Carbonated beverages

Source: (HTC investor presentation, 2021)



Figure 2.3 HAADTHIP Non-Carbonated beverages

Source: (HTC investor presentation, 2021)

The New Products of HTC in 2021, the company has a plan to face with an increase sugar tax in the next year (October 1, 2022) by relaunch zero sugar product (HTC investor presentation, 2021)

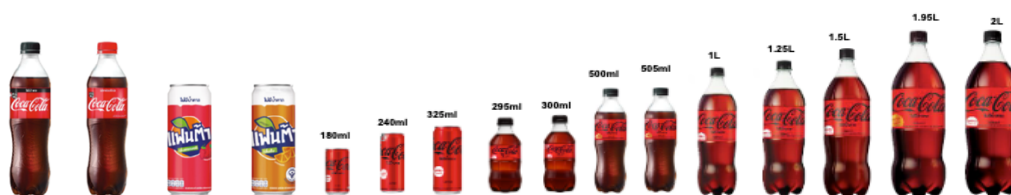


Figure 2.4 HAADTHIP Coca-Cola & Fanta Zero Sugar Relaunch

Source: (HTC investor presentation, 2021)

According to **Table 2.1**, the company's major source of income for the annual report period of 2018 to 2020 was sparkling beverage sales in southern Thailand, which accounted for roughly 94% of revenue from carbonated goods and 6% of revenue from non-carbonated goods.

Table 2.1 Revenue Structure

Detail	2020		2019		2018	
	Million Baht	%	Million Baht	%	Million Baht	%
Sparkling beverages	6,013.99	94.74	6,375.17	94.20	5,400.70	94.68
Non - carbonated products	333.74	5.26	392.68	5.80	303.31	5.32
Total Revenue from Sales	6,347.72	100.00	6,767.85	100.00	5,704.01	100.00

Source: (HTC annual report, 2020)

From 2018 to 2019, revenue climbed by 19% due to price changes and volume increases, while cost of goods sold (COGS) rose by 10.68%. COGS grew at a slower pace than volume, owing in part to reduced sugar prices and use, as well as cost reductions from economies of scale. As shown in **Figure 2.5**, total profit dropped by 5% from 2019 to 2020 due to lower beverage consumption as a result of the COVID-19 pandemic (HTC annual report, 2020).

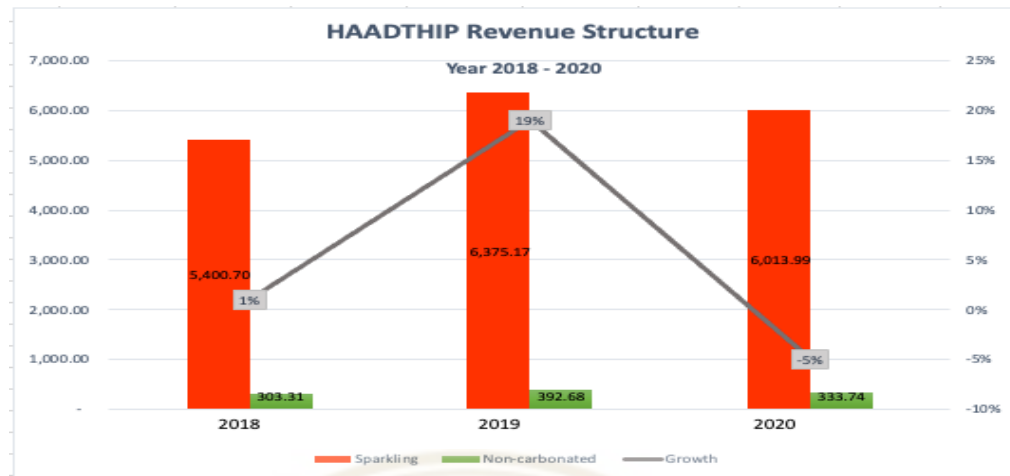


Figure 2.5 Revenue Structure

Source (HTC annual report, 2020)

As seen below, the company's major source of income in 2020 was from its brands, packaging, and distribution network:

Revenue Contribution by Brand

Shown in **Figure 2.6**, profits from carbonated beverages made up 65% from Coke, 22% from Fanta and 7% from Sprite, while non-carbonated beverages involved 3% from Namthip Drinking Water, 1.5% from Schweppes Lemon Soda, 1% from Minute Maid, and 0.2% from Bon Aqua 100% natural mineral water (HTC Investor presentation, 2020)

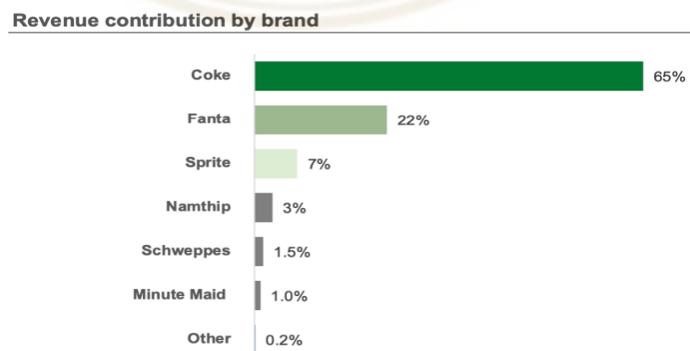


Figure 2.6 Revenue contribution by brand

Source: (HTC Investor presentation, 2020)

Revenue Contribution by Package

Shown in **Figure 2.7**, profits by carbonated and non-carbonated beverage packaging comprised 83% from PET (polyethylene terephthalate), 12% from CAN, and 2% from RGB (Regular Glass Bottle), OWG (One-Way Glass), and (HTC Investor presentation, 2020).

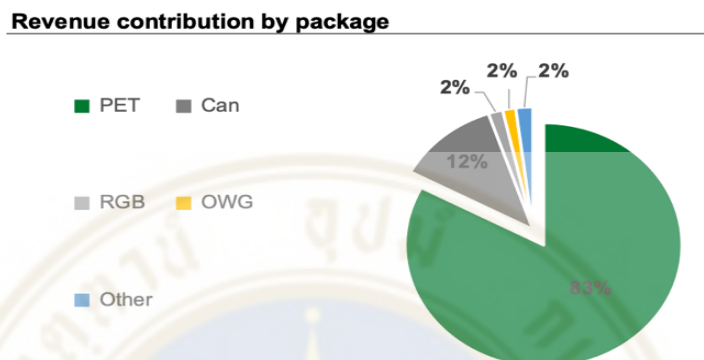


Figure 2.7 Revenue contribution by package

Source: (HTC Investor presentation, 2020)

Revenue Contribution by Distribution Network

As shown in **Figure 2.8**, profits from the distribution network in 2020 comprised indirect channels (47%) and direct channels (53%) with traditional trade at 33% HORECA (Hotel, Restaurant, and Catering), and 20% modern trade such as supermarket / convenience stores making up the direct channels, while large wholesalers such as Makro accounted for the indirect channels (investor-presentaion, Q3-2020).

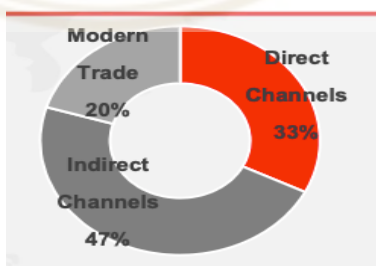


Figure 2.8 Revenue contribution by distribution network

Source: (investor-presentaion, Q3-2020)

SWOT Analysis

HTC has been in the beverage market for generations with consistent annual growth. Internal (strengths and weaknesses) and external (prospects and risks) variables, on the other hand, integrate the company operations and affect profitability.

Strengths:

1. HTC holds a market share of 83% in the carbonated beverage market in southern Thailand (HTC investor presentation, 2021)
2. HTC is the only organisation in southern Thailand allowed to make and supply “Coca-Cola” trademarked products.
3. The organisation has carbonated beverages in many varieties.

Weakness:

1. Distribution is restricted to southern Thailand.
2. Production is costly and involves expensive equipment and technology.
3. Some carbonated beverages present health risks.

Opportunities:

1. Few market competitors
2. Fabrication technology from Coca - Cola Company (U.S.A), Atlanta,

Georgia

Threats:

1. Consumer attitudes regarding health are shifting.
2. Decline in the economy means consumers' purchasing power is reduced.
3. COVID-19 situation

Strategies

Contingent on COVID-19 control measures, the company's operation strategy for 2021 involves establishing a target for sales growth of 3-6% over the preceding year (HaadThip Public Company Limited, 2020). The anticipated growth rate is based on the expectation that the economy would begin to revive in the second half of 2021 as a result of vaccine deployment, which will benefit Thailand's tourist industry as well as the country's broader economy.

HTC has a five-year strategy that includes expanding its market share in the non-alcoholic ready-to-drink (NARTD) sector from 25.9% to 30% (HaadThip Public Company Limited 2020). HTC employs the following approaches:

1. Expand no-sugar product lines including Coca-Cola no sugar to generate rapid revenue boost, and broadening the no-sugar product lines to include Fanta no sugar and Sprite no sugar as a way to insert the products into the firm's no-sugar collection in order to align with the growing trend of health-conscious consumers.
2. Promote the use of containers that ease global warming by encouraging growth of returnable glass bottled product sales (RGB) and highlighting local grocery stores, eateries and cafés as sales channels.
3. Employ various sales promotions to persistently push sales of beverages including Bon Aqua mineral water and Minute Maid through every sales channel. Further, the firm will use printed materials, signage, and online marketing to concentrate on better communicating with end consumers.
4. Use online platforms to boost sales and distribution channels by using the company's website, market place, and pure player to sell and distribute items more extensively.
5. Refine and enhance the marketing strategy to be more in accordance with real-world settings where the COVID-19 epidemic is still prevalent, by concentrating more on generating options for home consumption.
6. Use HTC's customer privilege/loyalty programme (MVIP Programme) as a policy to charm and motivate the customers, who are also valued business partners.

2.2 Haadthip (Htc) Business Operation

Figure 2.9 illustrates the production factories in Hatyai, Songkhla, and Poonpin, Surat Thani (with 7 production lines and 3 injection machines), 19 sales and delivery branches with 172 sales vehicles, and 2,000 workers servicing over 46,000 outlets (HTC investor presentation, 2021)

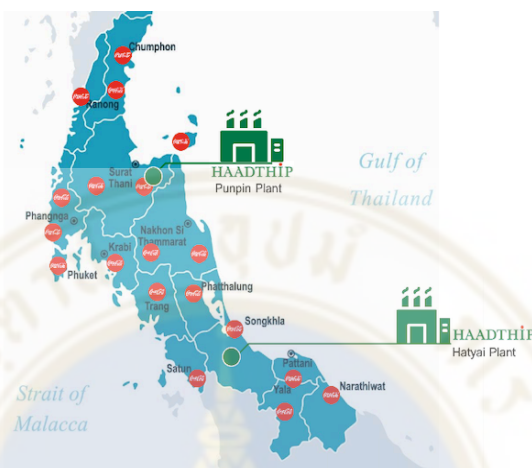


Figure 2.9 HAADTHIP Distribution Centers and Branches

Source: (HTC investor presentation, 2021)

Consumers have a positive impression of the firm. It employs a pre-sale strategy, taking orders one day prior to delivery to customers and distributing items through three channels. As shown in **Figure 2.10**, direct channels including traditional trade and HORECA (Hotel, Restaurant, and Catering), indirect channels, such as wholesalers (Makro) and retailers (Traditional Trade/HORECA), and modern trade, such as supermarkets/hypermarkets (Big C, Lotus, Tops Super Market, 7-eleven, Family Mart), are the three main channels (**HTC investor presentation, 2021**).

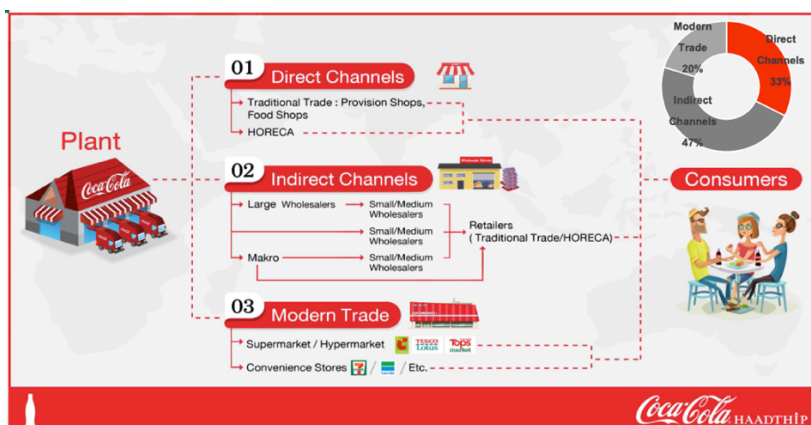


Figure 2.10 HAADTHIP Distribution Network

Source: (HTC investor presentation, 2021)

2.3 Haadthip Involvement

Shown in **Figure 2.11**, HTC has holdings in four corporations and one ancillary holding, as follows:

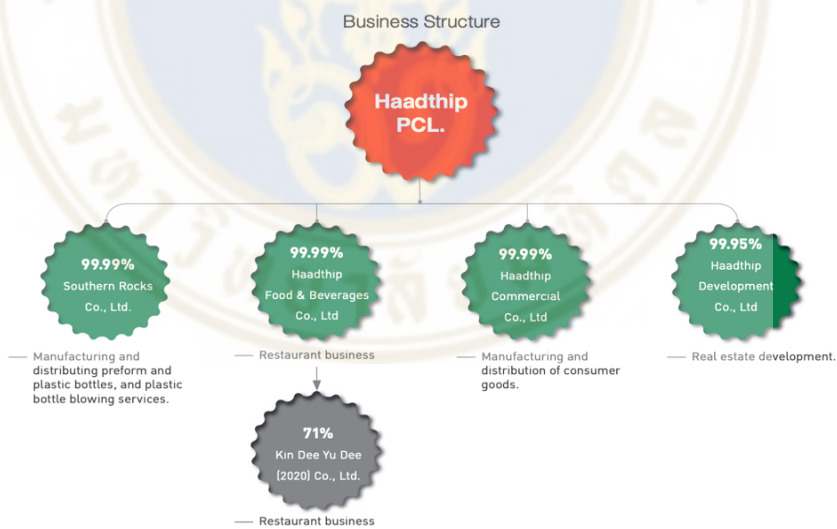


Figure 2.11 Business Structure

Source: (HTC structure, 2021)

Subsidiaries Business

With financial support from the BOI, the **Southern Rocks Co., Ltd.** promotes and offers semi-completed plastic bottles and offers services for blown plastic bottles. The firm's total capital amounts to THB 97 million, which translates to HaadThip Public Company Limited owning 99.99% of the company. The company has power over the subsidiary's financial and operational business activities, both direct and indirect (HTC structure, 2021).

With a total investment of THB 16 million and 99.99% participation by HaadThip Public Company Limited, **HaadThip Commercial Co., Ltd.** engages in the consumer goods production and distribution industry. As such, the parent corporation has direct and indirect influence over the subsidiary's financial and operational business activities (HTC structure, 2021)

With a total investment of THB 16 million and 99.99% participation by HaadThip Public Company Limited, **HaadThip Commercial Co., Ltd.** engages in the consumer goods production and distribution industry. As such, the parent corporation has direct and indirect influence over the subsidiary's financial and operational business activities (HTC structure, 2021)

HaadThip Development Co., Ltd. is a real estate development company with a net worth of THB 1 million and HaadThip Public Company Limited owning 99.99 percent of the company. The company has the power to oversee the subsidiary's financial and operational business activities, both directly and indirectly (HTC structure, 2021)

Indirect Subsidiary

KindeeYudee 2020 Co., Ltd. is a food and beverage sales and service company. Zen and Spicy Co., Ltd and HaadThip Food and Beverage Co., Ltd formed a joint venture (holding 71% shares). Kindee Yudee 2020 Co., Ltd. has a THB 30 million registered capital and THB 16.5 million capital (HTC structure, 2021)

Management and Administrative Structure

Maj. Gen. Patchara Rattakul is the CEO of HAADTHIP, and the company's management and administration structure includes the Board of Directors, Audit Commission, Nomination and Remuneration Commission, and Supervision Team. As shown in Figure 2.12, each member must have certain qualifications, duties, and functions (HTC annual report, 2020).

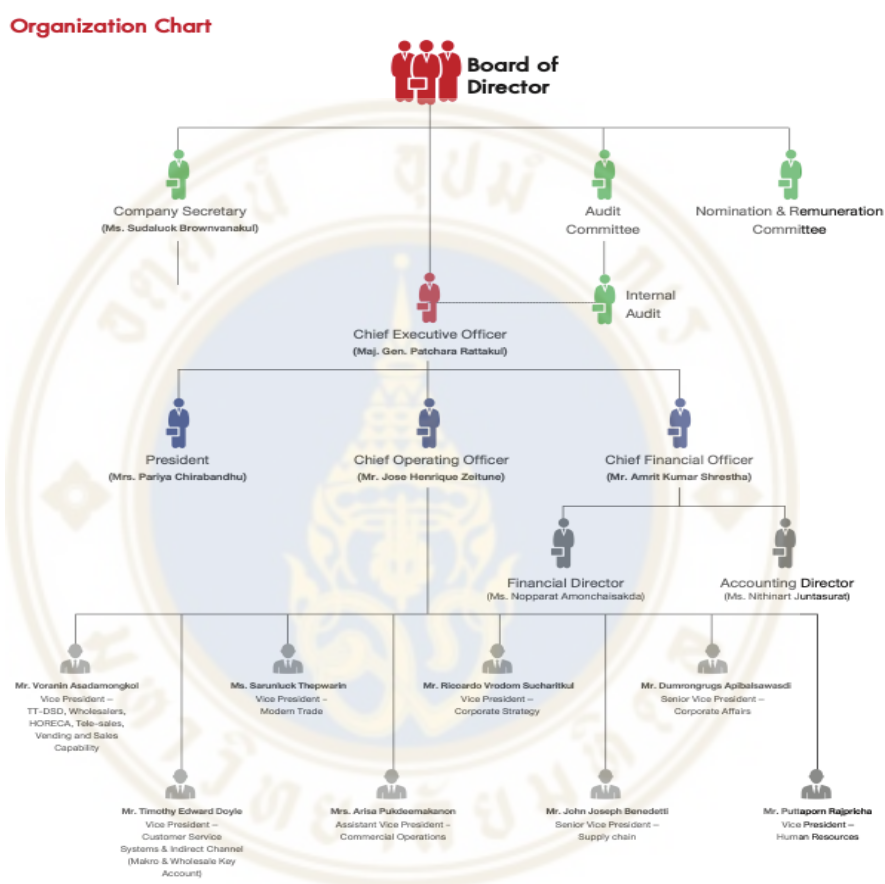


Figure 2.12 Organization Chart

Source: (HTC annual report, 2020)

Shareholders Structure

The organisation had a registered capital of THB201,210,180 as of December 31, 2020, comprising 201,210,180 common stocks having a par value of 1 Baht per share, and a paid up capital of THB200,960,500, comprised of 200,960,500 common stocks (HTC annual report, 2020)

Distribution of shares by nationality

Thai investors received 73.40% of HAADTHIP shares, or 147,508,716 shares, while foreign investors received 26.60%, or 53,451,784 shares. As seen in **Table 2.2**, foreign investors were limited to 35% (HTC annual report, 2020).

Table 2.2 Distribution of Shares by nationality

Nationality	Number of shares	% of paid-up share capital
Thai	147,508,716	73.40
Foreign	53,451,784	26.60
Total	200,960,500	100.000

Source: HaadThip Public Company Limited (2020)

Dividend Policy

After deducting all forms of reserves needed by law and set out by HTC, HTC's procedure is to disburse dividends at between 50% and 80% of the outstanding net profits. Dividends are disbursed based on the statements of Net Profits from the company's Consolidated Finances. Dividend disbursements, on the other hand, will be determined by the company's cash flow, investment strategy, and other requirements, as well as future conditions considered acceptable, as in **Table 2.3** (HTC annual report, 2020)

Table 2.3 Dividend Payment

Details of Dividend Payment	2020	2019	2018
Number of paid - Up capital (shares)	200,960,500	200,960,500	199,218,000
Profit for the year (million Baht)	564.94	440.70	249.07
Basic earnings per share (Baht)	2.82	2.21	1.25
Dividend per share (Baht/share)	1.90 ^{1/}	1.76	0.80
Total dividend payment (million Baht)	381.82	352.33	159.37
Dividend as % of profit for the year (%)	67.59	80.08	63.99

Source: (HTC annual report, 2020)

CHAPTER III

HOW TO OPERATE IN THAILAND'S FOOD & BEVERAGE MARKETPLACE

3.1 Gross Domestic Product In Thailand

According to Thailand's GDP (Gross Domestic Product) in the first quarter of 2021, Thailand showed a negative growth of 2.6% (year-on-year) (nesdc, 2021). Although it looks better than the fourth quarter of 2020 (nesdc 2., 2020), which shows a negative growth of 4.2%, Thailand is still facing a crisis such as a slowdown in the global economy because of the United States. The American trade war with China is the biggest influence in China and internationally. During the COVID-19 pandemic, GDP showed increased growth in the first quarter of 2021 compared to the fourth quarter of 2020 due to market expectations, as shown in **Figure 3.1**.

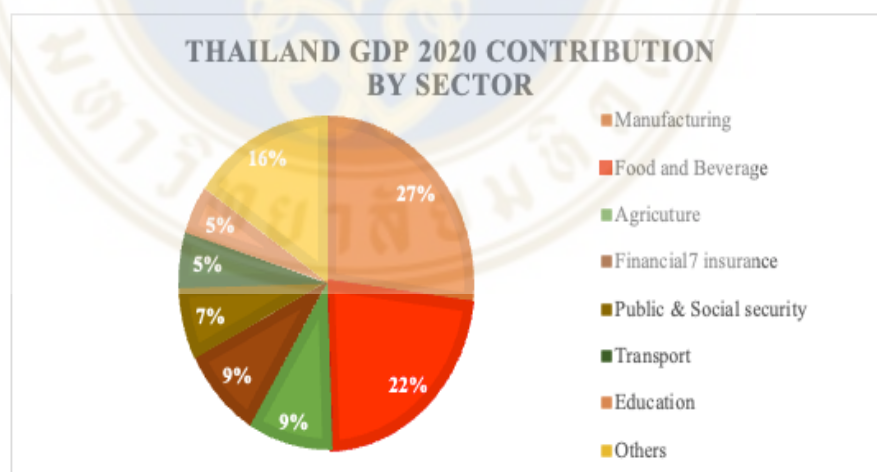


Figure 3.1 Thailand GDP 2020 Contribution by Sector

Source: (Statista-GDP, 2020)

3.2 Industry Analysis

The Coca-Cola Company (USA), the largest drinks company in the world, has headquarters in Atlanta, Georgia, it produces carbonated soft beverages and sells both their beverages and concentrates to licensed companies internationally. Thailand has two exclusively certified companies under the trademark “Coca-Cola” having production contracts with The Coca-Cola Company (USA), Atlanta, Georgia. The first Haadthip is a public company that produces and distributes only in southern Thailand. The other is Thai-Namtip Company Limited, which produces and sells in other parts of Thailand rather than in southern Thailand.

Sparkling or carbonated drinks are seasonal products. To cover the summer in southern Thailand, where consumption normally increase during the second and third quarters of each, as it is the high seasons for the travel industry, will allow the company to target marketing to its customers, retail stores, hotels, and restaurants. However, the COVID-19 pandemic has directly affected consumer consumption habits and, as the pandemic continues unabated customer consumption behaviour remains sedated. To address the downturn the company changed its marketing approach to increase value (HTC investor presentation, 2021) to respond to the covid-19 pandemic and maintain revenue levels.

The Thailand Food and Beverage Industry

Thailand’s food and beverage industry contributed 3.28 trillion Baht (22.4 %) to Thailand’s GDP (Statista-GDP, 2020) The drinks market has two distinct areas alcoholic drinks 65 percent, and non-alcoholic drinks 35 percent (Krungsri, 2019). There are few non-Alcoholic drink companies in Thailand, and more so in the carbonated drinks arena as the set-up investment is substantial, also the ability of newcomers to make a worthwhile profit is reduced due to the existing powerful producers’ economies of scale and strong bargaining powers. The two largest carbonated drink companies operating in Thailand, and many other countries, are the producers of the Coca-cola brand, including the products Coke, Sprite, and Fanta, are the Haadthip Public Company Limited and Thai-Namthip Company Limited. Followed by the Suntorypepsico

Company Limited who produces the Pepsi brand beverages such as Pepsi, 7 Up, and Mirinda 7 Up (Krungsri, 2019).

3.3 Other Player In Food & Beverage Industry In Thailand

The Haadthip Public Company Limited has some competition from Thai local brands, for example Sermasuk Public Company Limited, Ichitan Public Company Limited, Oishi Public Company Limited, Tipco foods Public Company Limited and Malee Public Company Limited.

Sermasuk Public Company Limited (Ssc)

The significant competitor of Haadthip Public Company Limited is Sermasuk Public Company limited. Sermasuk has larger scale of total revenue from carbonate drink and non-carbonate than Haadthip in **Figure 3.2**.

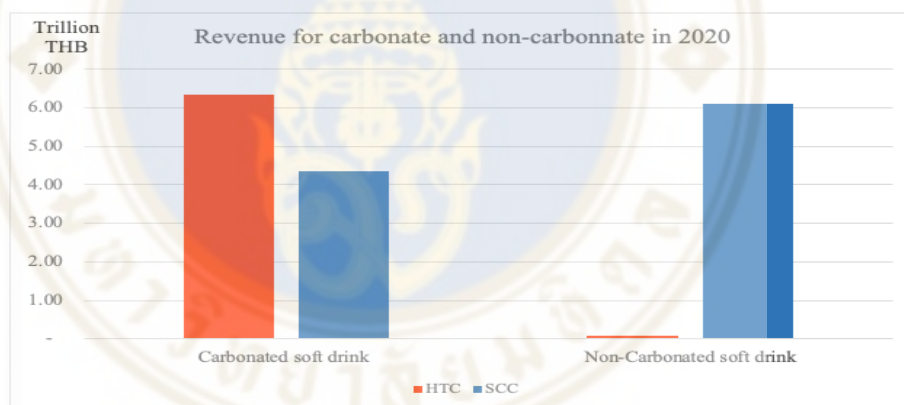


Figure 3.2 Revenue for carbonated and non-carbonated of HTC and SCC in 2020

Source: (HTC annual report, 2020), and (SSC annual report, 2020)

Sermasuk PLC beverage business was established in 1953. The company produces its own cola rival known as “est” and through aggressive marketing has become a very popular product. On the non-carbonated side of the business, Sermasuk markets product names such as Oishi, Rangwe, Cytal, and Powerplus. Sermasuk was bought by the Thai Beverage Logistics Co., Ltd in 2012 and subsumed into the Thai Beverage Group (Thai Bev) where it became a leading business in the group. Thai Bev

is a prominent company in the Thai beverage business, supporting both alcoholic and non-alcoholic products. (SSC, 2021)

Oishi Public Company Limited (Oishi)

Tea beverages and restaurants are Oishi's main business areas. Beverages provide 55 percent of Oishi's margin while the food produces 45 percent (Oishi, 2021). Oishi concentrates on bottled tea drinks as bottled tea makes up 6.4 percent of the non-alcoholic beverage marketplace (Oishi, 2021)The company is the market leader with a 48.4 percent market share (Oishi, 2021), and produces a wide variety of flavoured teas.

Ichitan Public Company Limited (Ichi)

Ichitan's market share, 30.3 percent (Oishi, 2021), is less than the Oishi Group and their primary produce, like Oishi's, is tea along with other carbonated beverages. Ichitan's most celebrated product is green tea. The company also retails Yen, Birely and Chew. The products' base ingredients are tea, herbs and fruit juices, which reflect consumers' requirements and desires. (Ichitan, 2021)

Tipco Foods Public Company Limited (Tipco)

The fundamental business of Tipco Foods revolves around the production and distribution of fruit juice, cold drinks, and bottled water. The income from beverage sales provided 65.92 percent of Tipco's income (TIPCO, 2020). Cold drinks and bottled water make up 52.4 percent (bottled water 48.1 and fruit juice 4.3 percent) to the Tipco non-Alcoholic drink market (Krungsri, 2019). That "Tipco" trademark fruit juice brand is well known in the marketplace as is "Aura" the bottled water brand (TIPCO-product, 2021)Tipco has 35 percent of market share in Juice segment and 17 percent of market share in mineral water segment (TIPCO, 2020).

Malee Group Public Company Limited (Malee)

The primary business of the Malee Group is the production and distribution of fruit and vegetable juice, canned fruit, milk, and cereal drinks. All the products are

marketed under the “Malee” brand name (Malee, 2021) and make-up 4.3 percent of the non-alcoholic drinks market (Krungsri, 2019)



CHAPTER IV

WHAT WE HAVE TO KNOW BEFORE INVEST IN HAADTHIP (HTC)

4.1 Covid-19 Pandemic Effect For The Company

The Covid-19 pandemic has significantly affected HaadThip's overall business, as a high proportion of beverages sold were bought by tourists who for over one year have not visited Thailand. HaadThip's reacted by adjusting its sales strategy, focusing more on the local market by increasing online sales and offering delivery through the emerging home delivery services to off-set the loss in sales to the tourist market.

It is reported that management analysis of quarter 1'2021 showed sale revenue was down by five percent compared to the same period in 2020. This was due to the Covid-19 situation directly affecting beverage consumption (HTC investor presentation, 2021). To mitigate this downturn, Haadthip promoted larger order sizes to reduce distribution costs.

Conversely, due to increased production efficiencies (production moved to Punpin) and a sugar content reduction, the gross profit margin was increased by 1.8 ppts. Giving the company an overall net profit increase of 22.7 compared to 2020. Overall, a 7.3 percent reduction in SG&A costs was achieved from lower transportation costs down by 8.8 percent, a 16.5 percent reduction of marketing costs and included the can and PET production relocation from Hatyai to the Punpin Plant cost (HTC investor presentation, 2021)in **Table 4.1**.

Table 4.1 Financial Performance Q1'2021

	Q1'2021	Q1'2020	% Y-o-Y
	THB mil	THB mil	
Domestic Sale Volume (MUC)	14.3	15.0	-5%
Made-to-order sale Volume (MUC)	0.9	0.4	125%
Total sale (MUC)	15.2	15.4	-1%
PROFIT AND LOSS STATEMENT			
Revenue	1,618	1,708	-5%
Gross Profit	671	678	-1%
Distribution expenses	312	348	-10%
Administration expenses	190	194	-2%
EBITDA	248	213	17%
EBT(excluding other income)	169	136	25%
Interest expenses	-4	-5	-31%
Tax expenses	-22	-13	74%
Net profit	147	120	23%
Gross profit margin	41.5%	39.7%	+1.8ppts
EBITDA margin	15.3%	12.5%	+2.9ppts
EBIT margin (excluding other income)	10.4%	7.9%	+2.5ppts
Net profit margin	9.1%	7.0%	+2.1ppts

Source: (HTC investor presentation, 2021)

4.2 Cost Risk

Due to HTC business type, manufacturing and distribution, a real cost risk comprising two elements, explained below, needs to be addressed.

4.2.1 Cost risk–raw material

A constant raw materials quality and cost risk exists as suppliers are always searching for means to reduce their raw material cost to maximise their profit and comply with customer pricing trends. Possibly leading to reduced quality that does not meet Coca-Cola's quality standards. It is imperative that HTC discusses with the current suppliers the need to maintain quality standards of raw material such as liquid sugar and PET bottles, being our chief materials.

Liquid sugar: as global warming advances, climatic changes are more common and amplified increasing the risk of sugar obtainability and therefore its by-products. HTC has obligated its liquid sugar suppliers to provide the contracted volumes so as not to affect annual sales targets.

PET Bottle: PET is key company cost and is growing because of the current non-returnable bottle tendency. The price of the resins needed for the production of PET bottles is driven by the international oil price, which fluctuates in-line with global demand. Fortunately, last year the cost of the resin was reduced. HTC maintains a close watch on resin prices and buys for future requirements, if possible, when the market price is low, so keeping the bottle price as low as possible. Also, in collaboration with the PET bottle manufacturer HTC has designed and produced lighter bottles using less resin but maintaining the required bottle strength.

4.2.2 Cost risk–distribution cost

The largest component of distribution cost is fuel, and the oil price is volatile and beyond HTC's control. HTC has invoked the strategy to use B20 diesel for its trucks, as it is currently at a lower price than standard diesel. It must be recognised that all fuel price fluctuated, and it is difficult to predict future prices.

Logistic network planning allows the company to sub-contract non-commercially cost-effective distribution routes to other transport operators and add a significant amount to the distribution cost. The risk is that other truck operations may encounter unexpected and unavoidable delivery issues that may influence HTC's logistic network planning.

4.3 Change In Consumer Preference

As the social trend is to become more health conscious this has focussed consumers' mindfulness on healthier drinks containing less sugar and additives and are more natural such as milk, fresh fruit juice, mineral water, tea, and either abstaining from or reducing the intake of foods and beverages believed to be detrimental to their health. The soda industry's products are judged as bad for ones' health, this therefore has had an effect on drinks manufacturers. Due to the alterations in customers] attitudes actions and growing government public health initiatives, the Company has adopted a new business approach, positioning itself as Thailand's leading manufacturer and distributor of a full range of beverages. The Company is committed to driving the Company's sustainable growth by expanding the distribution network to cover all areas

nationwide, increasing sales and market shares, and driving the Company's major brands to be the leading brands that capture the hearts of Thai consumers. This ran concurrent with consolidating the Company by pushing the growth of healthy drink products to address customer demand. To that effect, the Company has developed a new range of products for progressive health and wellness of consumers. In response to today's consumers' growing demand for products with less sugar and more nutrients, the Company has rolled out several low sugar products whilst reducing sugar content in the existing products. In the long-term, the Company pledges its commitment to contributing to the better health and wellness of consumers.

Health living, including beverage consumption, is now a growing social trend and has encouraged consumers to purchase perceived health beneficial drinks, while reducing food and drinks considered detrimental to health. Therefore, the sparkling beverage products considered unhealthy have been directly affected negatively. To advance HTC's position in the Thai market, the company has adapted by increasing its range of beverages to reflect consumers' health drinks trend to become Thailand's leading beverage retailer carrying a full range of soft drinks. The company is steadfast in driving sustainable growth by expanding the distribution network to cover all areas nationwide, increasing sales and market shares, and propelling the Company's brands to be the principal brands with Thai consumers' loyalty. Along with expanding the variety of health drinks and making them available throughout the country to fulfil consumer needs everywhere. One major area of consumer requirement is reduced sugar drinks to which the company has responded, with the bonus of added nutrients. HTC is obligated to advancing the health of all Thais by continuing to produce socially responsible beverages far into the future.

CHAPTER V

FINANCIAL STATEMENT ANALYSIS

5.1 Financial Highlight

HaadThip's revenue over the last five years has oscillated due to more dramatic seasonal variations and the current disaster circumstances. Sales revenue decreased between 2016 to 2017 because of torrential rain and severe flooding from the summer until the end of the year, causing people to be gloomy and so slower growth. Revenue increased in 2018 because of improved sales volume. Price modifications and volume development caused a 19 percent increase in revenue in 2019, with the cost of goods sold (COGS) increased by 10.68 percent. The COGS growth rate was less than the volumes, as sugar prices were lower and saving related to economies of scale. As the Covid-19 pandemic emerged in 2020 so beverage consumption sales declined as did company profits, because COGS and net income variable depend on company revenue as shown in **Figure 5.1**.

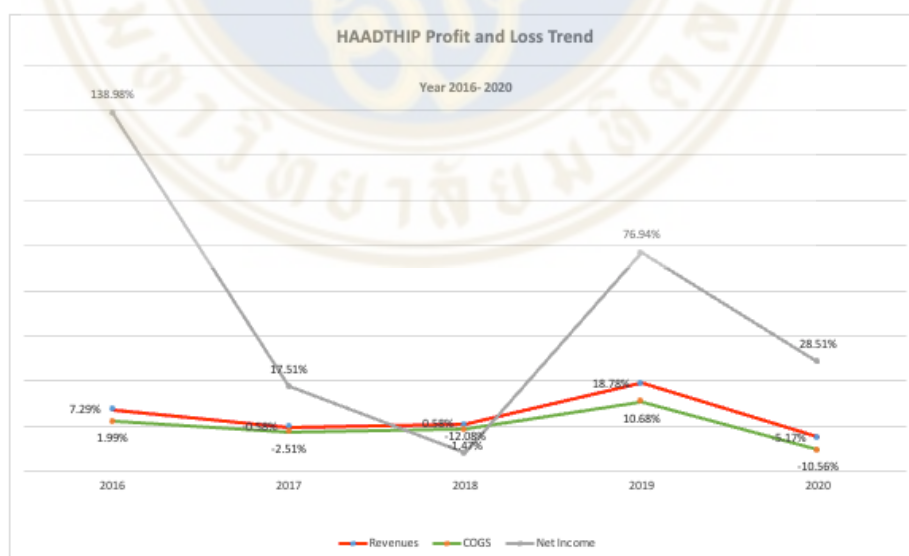


Figure 5.1 HAADTHIP Profit and Loss Trend

Source: (HTC, 2017-2020)

5.2 Financial Operation Ratios

Table 5.1 Financial Operation Ratios of HaadThip 2016–2020

Haadthip Public Company Limited					
Ratios	2020	2019	2018	2017	2016
Current ratio (times)	1.23	1.11	0.89	0.93	1.05
Quick Ratio (times)	0.88	0.80	0.61	0.64	0.76
Cash conversion cycle (days)	47.06	40.26	37.17	39.28	41.65
- Inventory Conversion Period (days)	30.52	26.00	25.72	25.19	28.64
- Receivable Collection Period (days)	36.01	33.96	35.48	37.26	41.34
- Payable Deferral Period (days)	19.47	19.70	24.03	23.17	28.33

Source: own calculation. HaadThip Public Company Limited Financial Statement 2016-2020

Table 5.2 Financial ratios of Sermsuk 2016-2020

Sermsuk Public Company Limited					
Ratios	2020	2019	2018	2017	2016
Current ratio (times)	1.36	1.17	1.03	0.98	0.98
Quick Ratio (times)	1.05	0.82	0.74	0.65	0.66
Cash conversion cycle (days)	25.31	25.62	26.37	24.14	22.53
- Inventory Conversion Period (days)	30.43	27.82	29.69	32.30	40.72
- Receivable Collection Period (days)	24.54	28.05	33.29	33.68	38.64
- Payable Deferral Period (days)	29.66	30.25	36.61	41.84	56.83

Source: own calculation. Sermsuk Public Company Limited Financial Statement 2016-2020

Current ratio and quick ratio

Table 5.2 shows that Sermsuk had a slightly higher than current ratio and quick ratio than Haadthip; it also had a higher liquidity due to current liabilities payment, and those that required reimbursement within the year. The current ratio and quick ratio of Haadthip and Sermsuk have improved annually, meaning both companies have perennial growth capacity.

Cash conversion cycle

Sermsuk has a shorter date of cash conversion than Haadthip. In 2020, it took Haadthip about 48 days to convert their inventory to sale, customer cash collection and pay suppliers, but Sermsuk took only 26 days, 22 days quicker. Both companies' inventory conversion cycle is similar, around 30 days and they have a comparable turnover. The Payable Deferral Period of Haadthip has shorter than Sermsuk because Haadthip strictly follows the suppliers credit terms. Haadthip's suppliers are principally aligned to the Coca - Cola Company (U.S.A) as official purveyors and because of this Haadthip's credit terms must comply with the Coca – Cola corporate rules.

5.3 Financial Return Ratios

Using the financial return ratio over the last five years to examine the Dupont's analysis of ROA and ROE, and compare Haadthip's with its principal competitor Sermsuk (SCC), the results are shown below:

Dupont's Analysis of ROA

Table 5.3 Dupont's Analysis ROA of HaadThip 2016-2020

HaadThip Public Company Limited					
Dupont's Analysis of ROA	2020	2019	2018	2017	2016
EBIT Margin (EM)	10.10%	7.37%	5.26%	5.98%	5.16%
Total Asset Turnover (TATO)	1.26	1.40	1.22	1.22	1.24
Dupont's Analysis of ROA	12.69%	10.33%	6.40%	7.28%	6.42%

Source: own calculation. HaadThip Public Company Limited Financial Statement 2016-2020

Table 5.4 Dupont's Analysis ROA of Sermsuk 2016-2020

Sermsuk Public Company Limited					
Dupont's ROA	2020	2019	2018	2017	2016
EBIT Margin (EM)	1.56%	-3.91%	-2.57%	-2.17%	-1.10%
Total Asset Turnover (TATO)	0.87	0.96	0.91	0.86	0.66
Dupont's Analysis of ROA	1.36%	-3.76%	-2.34%	-1.86%	-0.72%

Source: own calculation. Sermsuk Public Company Limited Financial Statement 2016-2020

DuPont's analysis permits stakeholders to concentrate on each individual financial performance metric to recognise the strengths and weaknesses. The analysis of return on asset indicates four rudiments profit margins, tax management, tax change, and total asset turnover. Dupont's ROA formula is **EM x TATO**. We comprehend that the company is effective in managing the return of assets by profit in total revenue and total revenue in an average of total assets.

According to Dupont's Analysis of ROA, this analysis indicates that the performance of HaadThip concerning EBIT margin and total asset turnover (TATO) was higher than Sermsuk. In 2020, Haadthip had a better ROA (12.69%-1.36%) of 11.33% and a greater EBIT margin (10.10%-1.56%) of 8.54% when likened to Sermsuk. The results are shown in **Table 5.3** and **Table 5.4**. Meaning, HaadThip administered their total assets and total revenue effectively and increased EBIT. Also, HaadThip had a total asset turnover (TATO) that was greater than Sermsuk (1.26-0.87) by 0.39 because the company could earn revenue by effective total asset operation.

Sermsuk for 2016- 2019 had higher total expense than total revenue. Leading to Sermsuk having a negative ROA because they have a EBIT Margin lower than their total revenue, shown in **Table 5.4**.

Dupont's Analysis of ROE

Table 5.5 Dupont's Analysis ROE of HaadThip 2016-2020

HaadThip Public Company Limited					
Dupont's Analysis of ROE	2020	2019	2018	2017	2016
Tax (Ta)	10.66%	7.62%	7.63%	5.77%	2.93%
Tax Burden (TB)	0.8	0.8	0.8	0.8	0.8
Tax Management (TM)	1.12	1.15	1.15	1.18	1.21
Interest Burden (IB)	0.97	0.96	0.90	0.89	0.84
Profit Share (PS)	1.00	1.00	1.00	1.00	1.00
TL and NCI	1.61	1.72	1.74	1.81	1.90
Liability to Equity ratio	0.61	0.72	0.74	0.81	0.90
Non-Controlling Interest (NCI)	0.00054	0.00001	0.00001	0.00001	0.00000
Dupont's Analysis of ROE	17.71%	15.67%	9.26%	11.03%	10.00%

Source: own calculation. HaadThip Public Company Limited Financial Statement 2016-2020

Table 5.6 Dupont's Analysis ROE of Sermsuk 2016-2020

Sermsuk Public Company Limited					
Dupont's Analysis of ROE	2020	2019	2018	2017	2016
Tax (Ta)	35.50%	-68.12%	0.97%	20.11%	22.20%
Tax Burden (TB)	0.8	0.8	0.8	0.8	0.8
Tax Management (TM)	0.81	2.10	1.24	1.00	0.97
Interest Burden (IB)	0.80	0.99	0.68	0.95	0.89
Profit Share (PS)	1.00	1.00	1.00	1.00	1.00
TL and NCI	1.41	1.39	1.38	1.40	1.41
Liability to Equity ratio	0.41	0.39	0.38	0.40	0.41
Non-Controlling Interest (NCI)	0.00	0.00	0.00	0.00	0.00
Dupont's Analysis of ROE	0.99%	-8.71%	-2.17%	-1.98%	-0.71%

Source: own calculation. Sermsuk Public Company Limited Financial Statement 2016-2020

The DuPont's analysis of return on equity has many elements which are earning leverage, capital structure leverage, and return on asset. The Dupon'ts ROE formula is **ROA*Tax Burden*Tax Management*Interest Burden*Profit Share*TL and NCI**.

From **Table 5.4**, the DuPont's analysis permits stakeholders to concentrate on each individual financial performance metric to recognise the strengths and weaknesses. The analysis of return on equity has various fundamentals earning leverage, capital structure leverage and return on asset. The Dupon'ts ROE formula is **ROA*Tax Burden*Tax Management*Interest Burden*Profit Share*TL and NCI**.

Regarding tax management, Haadthip has a better tax position than Sermsuk because it has a good percentage of income tax (T) and income before tax (EBT). Sermsuk (SSC) was a negative tax in 2019 because it had the lowest income before tax and had the highest income tax (T). Both companies managed the interest burden ratio well, near 1 during 2016 to 2020.

In terms of interest management, both companies can manage the interest burden ratio is nearby 1 during 2016-2020, when related to yearly EBT and EBIT for both companies.

Overall, we found that HaadThip (HTC) had a superior ROE than Sermsuk (SSC) because the company had better EBIT margin (EM) and total asset turnover (TATO).

CHAPTER VI

VALUATION

6.1 HAADTHIP (HTC) PRO FORMA STATEMENT

The COVID-19 pandemic has had a substantial impact on the revenue of HaadThip. Nevertheless, through commercial and market execution activities, the company was able to improve the NARTD value of their shares to 25.9% in 2020 (HTC annual report, 2020). For this case, in 2021, we annualize the actual number of income statements from the first quarter of 2021 discounted back by CAGR average from sale growth in 2020 since the first wave of Covid-19 pandemic in Thailand. And we use the GDP growth forecast in the year 2021 provided by the Bank of Thailand (BOT) as 1.80% instead of the historical growth of the HaadThip period from 2016 to 2020 as 4.18% to forecast sale revenue of HAADTHIP from 2021 to 2025 in **Figure 6.1**.

Forecast Summary in Monetary Policy Report - June 2021			
%	2020*	2021	2022
GDP Growth	-6.1	1.8 (3.0)	3.9 (4.7)
Headline Inflation	-0.8	1.2 (1.2)	1.2 (1.0)
Core Inflation	0.3	0.2 (0.3)	0.3 (0.4)

Figure 6.1 BOT Forecast Summary in Monetary Policy Report

Source: Bank of Thailand (BOT), 2021

Unfortunately, the Bank of Thailand (BOT) has slashed its economic growth projection for this year to 0.70%. With the spread of the Delta variant, the third wave of Covid-19 outbreak has a severe impact on the country's economy. The central bank conducted its earlier projection (BOT, 2021) in **Figure 6.2**. The NEWS was updated on August 4, 2021.

ASIAN CURRENCY NEWS AUGUST 4, 2021 / 2:49 PM / UPDATED 4 DAYS AGO

UPDATE 3-Thai c.bank keeps rate at record low, cuts GDP outlook amid COVID surge

By Orathai Sriring, Kitiphong Thaichareon

4 MIN READ



- * BOT voted 4-2 to hold key rate at record low 0.50%
- * Cuts 2021 GDP growth outlook to 0.7% from 1.8% seen earlier
- * 2022 GDP growth forecast cut to 3.7% from 3.9%
- * C.bank to ease policy further this year - analyst (Adds more on BOT's outlook in paragraphs 6-7)

BANGKOK, Aug 4 (Reuters) - Thailand's central bank left its key interest rate unchanged at a record low on Wednesday in a split vote and slashed its 2021 economic growth forecast as the Southeast Asian country struggles with its biggest wave of COVID-19 infections to date.

Figure 6.2 Asian Currency NEWS Updated BOT cuts 2021 GDP rise to 0.7%

Source: (BOT, 2021)

However, it was assumed that the economy would recover by 2023. We predict that the COVID-19 pandemic will recover by 2024 since we believe that Thailand has an efficient vaccine distribution and experienced medical personnel. From the sales record, we have found an abnormal growth when HaadThip sales jump to 19% in 2019. The reason is due to the product price adjustments. Therefore, we decided to use 0.70% instead of 1.80% in our revenue forecast of HaadThip. For expenses, in terms of cost of goods sold (COGS) and selling and administrative expenses, we forecast based on revenue portion for each year as detailed in **Table 6.1**.

Table 6.1 Pro forma HTC's Statement of Revenue 2021-2025

Statement Data	2016	2017	2018	2019	2020		2021F	2022F	2023F	2024F	2025F
Income Statement - Standardized (Currency: As Reported)	Actual						Forecast				
Field Name	31-12-2016	31-12-2017	31-12-2018	31-12-2019	31-12-2020		31-03-2021				
Profit and Loss											
Revenue from Goods & Services	5,704.00	5,670.99	5,704.01	6,775.50	6,425.42		6,024.97	6,067.14	6,109.61	6,152.38	6,195.45
Cost of Operating Revenue (COGS)	3,934.92	3,836.24	3,780.01	4,183.66	3,741.91		3,442.13	3,466.23	3,490.49	3,514.93	3,539.53
Gross Profit	1,769.08	1,834.75	1,924.00	2,591.84	2,683.51		2,582.83	2,600.91	2,619.12	2,637.45	2,655.92
Selling, General & Administrative Expenses - Total											
	1,501.56	1,515.07	1,642.64	2,107.29	2,052.93		2,178.83	2,194.08	2,209.44	2,224.91	2,240.48
Operating Profit before Non-Recurring											
Income/Expense (EBIT)	294.33	339.19	299.76	499.33	649.21		427.85	430.84	433.86	436.89	439.95
Interest Expense	40.03	38.90	30.41	24.27	16.67		12.00	12.08	12.17	12.25	12.34
Income before Taxes (EBT)	248.37	300.65	269.64	477.06	632.33		414.97	417.88	420.80	423.75	426.72
Taxes	0.00	0.00	0.00	0.01	0.01						
Income Taxes (T)	7.28	17.34	20.57	36.34	67.39		72.41	72.91	73.42	73.94	74.46
Net Income before Minority Interest	241.09	283.31	249.07	440.72	564.94		342.57	344.97	347.38	349.81	352.26
Minority Interest	0.01	0.01	0.01	0.02	(1.39)		(0.38)	(0.38)	(0.38)	(0.38)	(0.38)
Net Income	241.08	283.30	249.07	440.70	566.34		342.95	345.35	347.76	350.19	352.64

Source: own calculation. Refinitive, 2021

6.2 Capital Asset Pricing Model (Capm)

The Capital Asset Pricing Model (CAPM) describes the relationship between risk and expected return for assets (Corporate Finance Institute, 2021). CAPM is applied throughout finance for pricing risky securities and generating expected returns for assets given the risk of those assets and costs of capital. Thus, we use market risk premium and risk premium to calculate CAPM.

Market Risk Premium

The Market Risk Premium (MRP) is the difference between the expected return on a market portfolio and the risk-free rate. We use the Market Risk Premium from Professor Aswath Damodaran which is 5.72% covid adjusted instead of 6.27% (Damodaran, 2021). This data was updated on July 1, 2021.

Country	Africa	Moody's rating	Rating-based Default Spread	Total Equity Risk Premium	Country Risk Premium	Sovereign CDS, net of US	Total Equity Risk Premium2	Country Risk Premium3
Thailand	Asia	Baa1	1.32%	5.72%	1.34%	0.45%	4.84%	0.46%

Figure 6.3 Total Equity Risk Premium

Source: Damadoran, 2021

Beta

Beta is a measure of the volatility for security or portfolio compared to the market. We use the beta for Haadthip stock as of December 30, 2020 from SET index 2021 in Figure 6.4.

Statistics	Accumulated: Turnover Ratio, Value Trade/Day		
	YTD 09 Jul 2021	2020 30 Dec 2020	2019 30 Dec 2019
Listed share (M.)	200.96	200.96	200.96
Market Cap (MB.)	7,134.10	6,430.74	4,561.80
Price (B./share)	35.50	32.00	22.70
BVPS (B./Share)	17.90	15.13	14.49
P/BV (X)	1.98	2.11	1.58
P/E (X)	12.02	12.63	9.84
Turnover Ratio (%)	37.15	86.51	55.66
Value Trade/Day (MB.)	21.75	19.53	9.25
Beta	0.33	0.65	0.47

Figure 6.4 Beta for HTC's Stock

Source: SET Index, 2021

Risk-Free Rate

The **Risk-Free Rate** is the theoretical rate of return of an investment with zero risks (Corporate Finance Institute, 2020). We use the risk-free rate of 10-year government bonds from Thai BMA as 1.50% as of August 6, 2021 (ThaiBMA, 2021) in Figure 6.5.

Government Bond Yield Curve

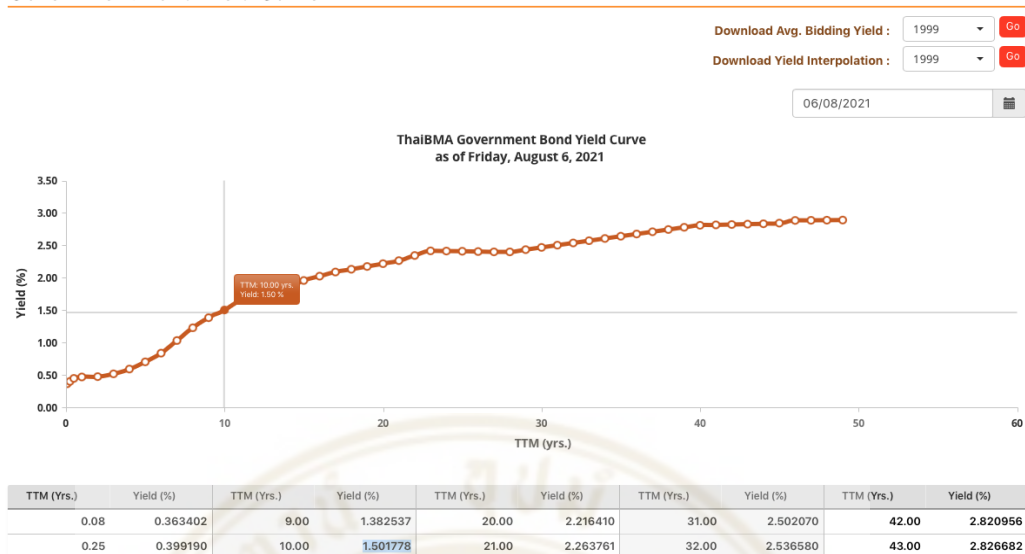


Figure 6.5 Government Bond Yield Curve

Source: ThaiBMA, 2021

In terms of calculating capital pricing model (CAPM), we use the risk-free rate of 10-year government bonds from Thai BMA as 1.50% (ThaiBMA, 2021), equity risk premium from Damadoran as 5.72% (Damadoran,2021), and beta as 0.65 (SET Index,2021). As a result, the CAPM for HaadThip is 5.22% as shown in **Table 6.2**.

Table 6.2 Calculation Capital Asset Pricing Model (CAPM)

CAPM CALCULATION	
Risk free	1.50%
Beta	0.65
Market Risk Premium	5.72%
CAPM	5.22%

Source: own calculation. Capital Asset Pricing Model (CAPM)

6.3 Terminal Value

Terminal value is the value of an asset, business, or project beyond the forecasted period when future cash flows can be estimated. Terminal value assumes a business will grow at a set growth rate forever after the forecast period. Terminal value often comprises a large percentage of the total assessed value (Investopedia, 2021).

According to the HaadThip annual report 2020, based on Kasikorn Bank Researcher, the estimated Non-alcoholic Ready to Drink (NARTD) market growth in Thailand is 0.5 to 1.5% **Figure 6.6.**



Figure 6.6 NARTD Market growth in Thailand in 2021

Source: Kasikorn Bank Researcher, 2021

As we previously mentioned, the Bank of Thailand (BOT) has slashed its economic growth projection for this year to 0.70%. Therefore, we use terminal growth of 0.70 % to further calculate the discounted cash flow (DCF) method.

6.4 Weighted Average Cost Of Capital (Wacc)

We applied the discounted cash flow method to HaadThip. To analyze whether they should invest in a project or purchase new equipment, the process usually uses its weighted average cost of capital (WACC) as the discount rate when evaluation the DCF. The WACC incorporates the average rate of return that shareholders in the firm are expecting for the given year.

In terms of WACC calculation, we calculated the weight of debt (Wd) as 5.98% from the debt of 441 million Baht and weight of equity (We) as 94.02% from 6,933 million Baht of the capital structure. We use the average effective cost of debt calculated from the financial statements as 2.90% and the average effective cost of

equity calculated from risk-free rate, equity risk premium, and beta as 5.22%. The debts include all interest-bearing debt which short-term and long-term borrowings from financial institutions. For Tax, we use the latest rate from the revenue department for corporate tax, which is 20%. As a result, the weighted average cost of capital (WACC) calculation is equal to 5.05% as detailed in **Table 6.3**.

Table 6.3 Calculation Weighted Average Cost of Capital (WACC)

WACC CALCULATION	
RISK FREE (Rf)	1.50%
Market risk premium (MRP)	5.72%
BETA	0.65
Cost of Equity (Re) = Rf+Beta*MRP	5.22%
Weight of equity : We	94.02%
COST OF DEBT (Rd)	2.90%
Tax (1-80%)	20%
After Tax Cost of debt: Rd*(1-Tax)	2.32%
Weight of Debt; Wd	5.98%
Debt	441.32
Equity Value (BtMn) (Market Cap.)	6,933.12
WACC; We*Re+Wd*Rd	5.05%

Source: own calculation. Weighted Average Cost of Capital (WACC)

6.5 Discounted Cash Flow Method (Dcf)

Discounted cash flow (DCF) is a valuation method used to value investment by discounting the estimated future cash flows. DCF analysis attempts to figure out the value of investment today, based on projections of how much money it will generate in the future. The purpose of DCF analysis is to estimate the money an investor would receive from an investment, adjusted for the time value of money. (Corporate Finance Institute, 2020).

The time value of money assumes that money today is worth more than money tomorrow because it can be invested. Thus, a DCF analysis is appropriate in any situation wherein a person is paying money in the present with expectations of receiving more money in the future (Investopedia, 2021).

For HaadThip, we can use the concept of the present value of money to determine whether the future cash flows of an investment or project are equal to or

greater than the value of the initial investment. The DCF method finds the present value of expected future cash flows using a discount rate. HaadThip calculated its value through the DCF method is higher than the current cost of the investment. Therefore, the opportunity of HaadThip should be considered.

Discounted Cash Flow Formula
The formula for DCF is:

$$DCF = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n} + \frac{\text{Terminal Value}}{(1+r)^n}$$

CF = Cash Flow
r = Discount Rate (WACC)

Table 6.4 Discounted Cash Flow (DCF) Calculation

DCF	Actual						
	2020	2021F	2022F	2023F	2024F	2025F	
EBIT AFTER TAX (Nopat)	581.82	355.44	357.93	360.43	362.96	365.50	
Depre and Amortize	329.64	330.00	330.00	330.00	330.00	330.00	
Capital Investment (CAPEX)	(256.08)	(260.00)	(260.00)	(260.00)	(260.00)	(260.00)	
WORKING CAPITAL (AR+Inv.-AP)	257.14	532.84	296.89	298.96	301.06	303.16	
Change in working capital		275.70	(235.95)	2.08	2.09	2.11	
Cash Flow to the Firm (FCFF)	655.38	701.14	191.97	432.51	435.05	437.60	
FCFF	655.38	701.14	191.97	432.51	435.05	437.60	
Terminal Value						9,212.43	
Cash Flow to the Firm (FCFF)	655.38	701.14	191.97	432.51	435.05	9,650.03	
Discounted Cash Flow (DCF)	655.38	701.14	182.61	391.34	374.44	7,900.43	
NPV	7,654.67 bil. THB						
Debt	441.32 bil. THB						
Cash	215.46 bil. THB						
PV OF EQUITY VALUE	7,428.81 bil. THB						
No. of shares	200.96 mil. Shares						
Est. Share Value	36.97 THB						
Share Price (as 6 Aug 2021)	34.50 THB						

Source: own calculation. Discounted Cash Flow (DCF)

From the table above, HaadThip has operating income starting at 655 million baht in 2020 and decreasing to 437 million baht in 2025. The working capital change was calculated from the difference between working capital for this year and the previous. This is calculated from account receivable plus inventory and minus account payable.

For CAPEX, we estimated that the company invests in the next five years during 2021-2025 for a total of 260 million Baht for expanding production capacity and

has a plan to improve safety and economy of scale in the production line. The terminal value of the company is 9,212 billion baht (terminal growth 0.70%) which is 95.47% of the total cash flow to the firm. The present value of 7,654 billion Baht is deducted by net debt of 441 billion Baht and added by cash of 215 billion Baht. It makes the equity value of the company 7,428 billion Baht and divided by the number of shares (200 million shares). Therefore, the estimated share value is 36.97 Baht per share. This means that the share value is quite high compared to the latest share price of 34.50 baht per share, as of 06 August 2021.

In addition, to calculate the target price of HTC shares, we can use the capital asset pricing model (CAPM) to find the future price. Therefore, the capital asset pricing model (CAPM) or cost of equity was 5.22% to come up with the discounted cash flow (DCF) target price in 2021 of 38.90 Baht per share. We find the target price in 2022 calculated by target price in 2021 * (1+ percentage cost of equity) or $38.90 * (1+5.22\%)$ is equal to 40.93 Baht per share as details in **Table 6.5**.

Table 6.5 The Discounted Cash Flow Target Price

	2021		2022
	Intrinsic Value	Target Price	Target Price
Cash Flow to the Firm (FCFF)	43.38	45.64	48.03
Discounted Cash Flow (DCF)	36.97	38.90	40.93
CAPM >> Rf+Beta*MRP	5.22%		

Source: own calculation. Discounted Cash Flow (DCF) Target Price

6.6 Sensitivity Analysis

Sensitivity Analysis displays the changes of the target share price. The analysis is based on two variables, which in this case includes the WACC and terminal growth rate. According to the table below, we can observe the impact that it has on the company's target price. If we use the terminal growth of 1.00% and WACC of 1.05%, we can get the maximum target price of 3,276 Baht. On the other hand, if we use the terminal growth of 0.25% and WACC of 9.05%, we can get the minimum target price of 19.76 Baht. At the moment the share price of HTC is currently at 34.50 Baht and the target price by the DCF method is at 38.90 Baht as WACC of 5.05% and terminal growth of 0.70%. Therefore, according to this calculation, we can reflect the effect of WACC and terminal growth on the share price.

Table 6.6 Sensitivity Analysis of WACC and Terminal Growth

Terminal Growth	Sensitivity Analysis									
	WACC									
38.90	1.05%	2.05%	3.05%	4.05%	5.05%	6.05%	7.05%	8.05%	9.05%	
0.25%	211.74	94.53	61.02	45.13	35.87	29.76	25.45	22.24	19.76	
0.50%	304.62	108.61	66.31	47.82	37.48	30.80	26.18	22.78	20.16	
0.70%	474.45	123.63	71.35	50.27	38.90	31.71	26.80	23.23	20.50	
1.00%	3,276.64	156.89	80.76	54.54	41.28	33.21	27.82	23.95	21.04	
1.25%	N/A	203.66	91.00	58.79	43.56	34.60	28.74	24.60	21.52	
1.50%	N/A	292.95	104.55	63.88	46.16	36.14	29.75	25.30	22.03	
2.00%	N/A	3,150.18	150.98	77.79	52.64	39.80	32.07	26.88	23.16	
2.50%	N/A	N/A	281.83	100.67	61.66	44.48	34.89	28.74	24.47	
3.00%	N/A	N/A	3,029.76	145.35	75.10	50.70	38.41	30.97	25.99	
3.50%	N/A	N/A	N/A	271.24	97.22	59.37	42.92	33.70	27.78	

Source: own calculation. Sensitivity Analysis of WACC and Terminal Growth

CHAPTER VII

CONCLUSION

In this thematic paper, we have applied the discounted cash flow (DCF) valuation method to estimate the intrinsic value of a company. As a result, we used expected free cash flows in the future, and discounted back to the present value. Our paper estimated HaadThip's share price based on the discounted cash flow (DCF) with a forecast period of 2021 to 2025 and under the assumption that the company will grow along with GDP growth. We applied the beta of HTC's share provided by the SET Index of 0.65. The valuation in this paper is based on the estimated cost of equity at 5.22% with the weight of 94.02%, and the cost of debt at 2.90% with the weight of 5.98%, resulting in a weighted average cost of capital (WACC) of 5.05%.

For the sensitivity analysis, we use WACC and terminal growth to generate the possible intrinsic values. In this analysis, we found that as the WACC becomes higher, the share price decreases. At 5.05% of WACC and 0.70% of terminal growth resulted in a lower estimated target price compared to the current market price of 34.50 Baht as of 6 August 2021.

To compare the target price of 38.90 Baht with the current market price of 34.50 Baht. The recommendation from the discounted cash flow (DCF) suggests an investor "BUY" this stock because it is undervalued when compared to the current market price of 34.50 as of 6 August 2021.

7.1 Investment Recommendation

In this paper, for the valuation of target price from relative valuation method (37.69 Baht in 2021F) and discounted cashflow (38.90 Baht in 2021F) are not significantly different. The target price from both methods shown the price of HTC will increase from the current price of 34.50Baht (6 August 2021). We recommend the investor is to buy HTC stock because the current price of HTC is undervalued.

7.2 Triggers For Re-Assessment

The Discounted Cash Flows method is influenced by many assumptions including the cost of equity, growth in assets, terminal growth, whether controllable factors like capital structure policy or uncontrollable factors like the economy. This method is considered to be sensitive to these factors.

The cost of equity depends on the shareholder's required rate of return. For HaadThip the major shareholders are the Rattakul family, which holds 35.85% of total shares. The key trigger point is to re-assess the stock value when there is a significant change in the structure of shareholders.

Growth in assets depends on capital investment. HaadThip needs to improve in warehouse, building, vehicles, and upgrade a line of products every year. This investment will affect the terminal value of the company. Thus, the company needs to be re-assessed the business model, as the change will affect the revenue from the operations and may result in a change in cash flows.

Terminal growth depends on the company's sales activity, economic growth, market competitor, and company policy. HaadThip has leadership in the sparkling market in the South of Thailand of 82.2% or 26.4% of the non-alcoholic ready to drink (NARTD). The company policy plans to increase market share from 26.4% to 30% by 2025 of the non-alcoholic ready to drink (NARTD) market. Therefore, it should be considered to reassess a change in market share which might result from changes in consumer preferences and GDP of the consumer in recession economic conditions in a pandemic situation.

7.3 Limitations

Discounted Cash Flow (DCF) method is one of the significant financial tools and methods used by most companies to derive their value by using the future cash flows of the company. It is a very sensitive method of valuation as it finds out the value of a company today, based on projections of how much money it will generate in the future (Investopedia, 2021).

It should be taken while using this method since a small mistake in the assumption of terminal growth rate, beta, risk-free rate of return and market return can affect the value of the business significantly.

For the limitations in this method, the terminal value and weighted average cost of capital (WACC) are hard to estimate. This leads to difficulty to estimate free cash flow, the terminal growth rate, and WACC with high confidence level because it needs a lot of assumptions and details. Moreover, DCF valuation does not consider the relative valuation compared to competitors in the market. Therefore, we use discounted cash flow (DCF) method to estimate intrinsic value. This is necessary to focus on each key assumption. With the benefit of using discounted cash flow (DCF) method sensitivity analysis can be done, and WACC and implied in the cost of equity. This benefit can be used to verify how much the share price is over or under-valued. The DCF method does not require any comparable peers in the industry.

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