DISCOUNTED CASH FLOW VALUATION OF OSOTSPA PUBLIC COMPANY LIMITED



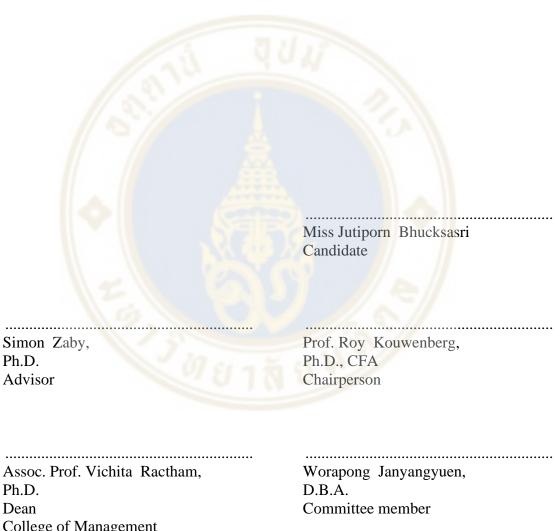
A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT COLLEGE OF MANAGEMENT MAHIDOL UNIVERSITY 2021

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DISCOUNTED CASH FLOW VALUATION OF OSOTSPA PUBLIC COMPANY LIMITED

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M.M. (CORPORATE FINANCE)

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ABSTRACT

The Osotspa Public Company Limited is Thailand's largest manufacturer of non-alcoholic drinks that specializes in energy drink. The company's three main business segments are: non-alcoholic beverages, personal care, health care and confectionery. The company also operates business in the south east Asian countries but most of the company's majority sales are in Thailand. The company (OSP) used the discounted cash flow valuation procedure to estimate the intrinsic value based on expected future cash flows and discounts at present value, it was having a target share price at 40.28 baht per share, 6.69% upside potential compared to the current market price of 37.75 baht as of 2 July 2021. The difference was between +/-10%, therefore, the recommendation to investor is to "HOLD" the OSP stock.

KEY WORDS: OSP/ Valuation/ Beverage/ Energy Drinks/ Discounted Cash Flow

36 pages

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LIST OF ABBREVIATIONS

β Beta

CAGR Compound Annual Growth Rate

CAPEX Capital Expenditure

CAPM Capital Asset Pricing Model

CBG CARABAO GROUP Public Company Limited

CG Corporate Governance

CLMV Cambodia, Laos, Myanmar, and Vietnam

COGS Cost of Goods Sold

COVID-19 Coronavirus disease starting in 2019

DCF Discounted Cash Flow

EBIT Earnings Before Interest and Taxes

EBITDA Earnings before interest, taxes, depreciation, and Amortization

EPS Earnings per share

EV Enterprise Value

FTSE Financial Times Stock Exchange

GDP Gross Domestic Product

HTC The Haad Thip Public Company Limited

ICHI The Ichitan Group Public Company Limited

IMF International Monetary Fund

IPO Initial Public Offering

MD&A Management Discussion and Analysis

MSCI Morgan Stanley Capital International

OISHI Oishi Group Public Company Limited

OSP Osotspa Public Company Limited

OEM Original equipment manufacturer

PV Present Value

QoQ Quarter on Quarter

LIST OF ABBREVIATIONS (cont.)

RTD Ready to drink

SAPPE Public Company Limited

SD Standard deviation

SEC Securities and Exchange Commission of Thailand

SET Stock Exchange of Thailand

SG&A Selling, General and Administrative Expense

THB Thai Baht currency

WACC Weighted Average Cost of Capital

YoY Year on Year

CHAPTER I INTRODUCTION



Osotspa Public Company Limited (OSP) is a consumer products manufacturing and selling company, which is categorized as Agro & Food Industry / Food & Beverage sector in the Stock Exchange of Thailand (SET). OSP's core products include (1) non-alcoholic beverages, which are energy drinks such as M-150 and Lipo, functional drinks (C-VITT), sports drinks and ready-to-drink coffee and (2) personal care

products such as Babi Mild and Twelve Plus and (3) products manufacturing, packaging and distributing services (OEM).

OSP's main source of revenue is non-alcoholic beverages, which accounted to 84% of the total sales; 69% goes to energy drink and 15% goes to functional drinks, while personal care and others are accounted to 10% and 6% respectively. The domestic revenue is 86%, while international accounted for 14% of the total revenue. The core strategies for OSP are sustainable growth via investment and multi-brand portfolio strategy, maximizing the profit by cost improvement strategy, and increasing sales through multiple channels. In 2020, OSP has save cost of THB 1,100 million through FIT-FAST-FIRM campaign and achieved around 10K bottles sales after 8-day pilot in 6 locations from partnering with Kerry Express.

OSP was affected by COVID-19 since the first half of 2020 due to the overall economic downturn, which lead to the change in consumers' behavior and transportation disruption. However, it made a recovery in 3Q2020 (Osotspa, 2020a), mainly due to the healthy trend from COVID-19 that increase the demand in functional drinks. With the diversified portfolio, although there was a decreased in demand of energy drinks, but the demand for functional drinks lead to C-Vitt remains the No. 1

Vitamin C drink brand with the market share of 32.0% (+690 bps from last year). Currently, 1Q2021 (Osotspa, 2021d), OSP still maintained its position of being number 1 in the energy drinks market and functional drinks with the market share at 54.9% and 34.9% respectively(Osotspa, 2021c).

The recommendation to investor based on Discounted Free Cash Flow to Firm Method (DCF) is to HOLD the OSP stock. The target share price from the DCF method is 40.28 baht with offering 6.69% upside potential compared to the stock market price as of 2 July 2021 which is 37.75 baht.



CHAPTER II OSOTSPA'S BUSINESS

2.1 Business Overview

In 1891, Osotspa Public Company Limited (OSP) was first established by Mr. Pae Osathanugrah in the name of "Teck Heng Yoo" as a pharmacy, focusing on selling the health concern products for Thai people (Osotspa, 2021a; this reference was also used for the following two paragraphs). About two decades after the establishment of the company, OSP successfully produced "Krisnaklan Trakilane", a remedy for digestive diseases for the Thai Army, which boosted the reputation of the company.

Then they changed the name to Osotspa Company Limited in 1995, Now it has been established for approximately 130 years. From bein0g a pharmacy, the company evolved and expanded its products into 3 main categories, which are non-alcoholic beverages, personal care, and other businesses, which are original equipment manufacturer (OEM), healthcare, and confectionery.

To prepare for the international expansion into the global market and achieve sustainable growth, the company was listed on Stock exchange of Thailand (SET) on 17th October 2018. Registered with the capitals equivalent to the total value of 3 billion boosting the net worth of Osathanugrah family, from 3,003,750,000 ordinary shares with par value of THB 1.0 each. Moreover, in June 2019, the company was added to a stock market index that covers over 3,000 companies in 47 countries, FTSE All-World Index and to the MSCI Global Standard Index in November 2019.

2.1.1 Vision, Mission and Value

Driven by technology and innovation, the company has the mission to continuously expand their business, which based on the vision of "The Power to Enhance Life" as follow (Osotspa, 2021a);

Vision

"The power to enhance life through a culture of high performance, innovation and sustainability."

Mission

Consumers: To enhance the lives of consumers every day through innovative products.

Business Partnerships: To be the preferred and trusted partner of choice by delivering customer service beyond expectations.

Shareholders: To deliver the best value to shareholders through good corporate governance and profitable, long-term growth.

Community: To be a positive force in our communities.

Employees: To create a high-performance and learning organization where employees are empowered, engaged, and committed to delivering their very best with passion and integrity.

Values

Integrity: We are committed to high ethical standards, honoring our commitments, taking personal responsibility for our own actions, and treating everyone fairly with trust, respect, and care.

Teamwork: We strive to work together effectively to achieve our goals while encouraging individual contributions.

Innovative thinking: We foster innovative thinking to enhance value for our consumers, customers, and ourselves

Passion to win: We are determined to be the best and have a compelling desire to improve and win in the marketplace

2.1.2 Products & Brands

The core products of OSP can be divided into 3 main categories, which are non-alcoholic beverages, personal care products and others (Original equipment manufacturer (OEM), healthcare and confectionery) as follows;

Non-alcoholic Beverages consisted of energy drinks, functional drinks, and sport drinks.

Energy drinks



Figure 2.1 Energy drinks (Osotspa, 2021a)

Functional drinks



Figure 2.2 Functional drinks (Osotspa, 2021a)

Sport drinks



Figure 2.3 Sport drinks (Osotspa, 2021a)

Personal care consisted of baby care, women's beauty care and men grooming.

Baby care



Figure 2.5 Women's beauty care (Osotspa, 2021a)

Men grooming



Figure 2.6 Confectionery (Osotspa, 2021a)

Others consisted of original equipment manufacturers (OEM), healthcare and confectionery.



Figure 2.7 Healthcare (Osotspa, 2021a)

Confectionery



Figure 2.8 Confectionery (Osotspa, 2021a)

2.1.3 Revenue Breakdown

OSP has successfully grown their brands in Thailand and internationally. In 2020, they had a total of 33 distributors in Asia, Africa, Eastern Europe, North America, and South America, which increased by 4 distributors from 2019. Of its main revenue, 86% originates from domestic (**Figure 2.9**). As for international sales, it accounted for 14% of the total sales. The main international markets are Myanmar, Cambodia, and Laos. Whereas, Indonesia and Vietnam are secondary markets. As for the revenue split by segmentation, non-alcoholic beverages are the major revenue accounting to 84% of the total sales; 69% goes to energy drink and 15% goes to functional drinks, while personal care and others are accounted to 10% and 6% respectively (Osotspa, 2020b).



Figure 2.9 Revenue Breakdown (Osotspa, 2020b)

The revenue from sales in 2020 was 25,583 million baht; 35.3% gross profit margin. While, the net profit was 3,504 million baht (net profit margin of 13.7%), higher than in 2018 and 2019. In addition, the total assets of OSP slightly increased to 25,855 million baht in 2020 (**Figure 2.10**).



Figure 2.10 Financial Performance (Osotspa, 2020b)

2.1.3.1 Segment performance and growth

As reported in OSP's Q3 2020 MD&A on 11th November 2020 (Osotspa, 2020a), the revenue from sales was THB 6,601 million, showing the recovery from Q2 due to the easing in lockdown measure nationwide. Although there was a flat revenue growth in 2020 from the COVID-19 crisis, OSP generated the revenue of THB 25,583 million YoY with the net profit of 3,504 million baht, +7.5% YoY and net profit margin of 13.7% YoY from the acceleration of the Fit Fast Firm projects that drive the increase in the profit.

As reported in Q1 2021 MD&A by OSP on 13th May 2021 (Osotspa, 2021c; this reference was also used for the following three paragraphs), the net profit and revenue from sales of OSP were all-time-high since the IPO. There was an increase of 8.4% YoY and 18.0% QoQ from THB 926 million to THB 1,004 million in the net profit, while, the revenue from sales was THB 6,776 million, which has increased by 1.3% YoY and 6.1% QoQ. The double-digit growth of both C-Vitt and from strong market execution in international business, helps neutralize the impact of COVID-19 on energy drinks and personal care segment, resulted in the growth in revenue from sales. Despite the market contraction from the COVID-19 crisis, OSP still maintained its position of being number 1 in the energy drinks market with the market share at 54.9% and number 1 in the functional drinks market with the market share at 34.9%. Although, there was a large decline in both the energy drinks and functional

drinks market in January due to the second wave of COVID-19. Nonetheless, the recovery in both markets is faster than the first time COVID-19 hit in 2020.

The performance and growth of each segment are as follows;

Beverage segment

The total beverage revenue in Q1 2021 was at THB 5,801 million, increased by 3.1% YoY given the highest base with unaffected of COVID-19 in Q1 2020 and the new phase of COVID-19 in Jan'21. Domestic beverages sales increased by 1.3% at 4,651 million baht, mainly from C-vitt as the key driver. The overall international beverages sales also showed 11% growth YoY.

Personal care segment

The total revenue for personal care was at THB 500 million, decreased by 18.9% YoY due to the change in spending pattern of the consumers during COVID-19 situation leading to the decrease in demand for personal care products, especially in the beauty products. In general, the overall demand of personal care products decreased, but some baby care product categories decreased at a lower rate.

Other segment (OEM, Healthcare and confectionery)

The total revenue for the overall other segment was at THB 475 million, increased by 6.4% YoY due to the increase in OEM for both glass bottles and personal care products, which in the long run could assist in maximizing the usage of our manufacturing facilities.

2.2 Strategies

The core strategies for OSP are sustainable growth via investment and multibrand portfolio strategy, maximizing the profit by cost improvement strategy, and increasing sales through multiple channels.

OSP not only expanded their business domestically in Thailand, but also internationally. Now, in 2021, they have their brand presence in 33 countries around the world, including Asia, Africa, Eastern Europe, North America, and South America. They are investing continuously to promote the future growth. In 2020, OSP investing in new beverage filling facilities in Ayutthaya expand the capacity in Thailand and integrate production facilities and support growth potential by obtaining the remaining 60% share in Calpis Osotspa Company Limited and new production facilities and glass packaging manufacturing in Myanmar. In addition, in 2021, they are considered for an inorganic growth and partnership with the partners who strategically fit with OSP. Moreover, OSP has diverse products and many brands to serve many customer segments and various distribution channels such as traditional trade, modern convenience stores and vending machines. While creating the long-term loyalty via M-Point campaign, a point collection digital platform. In 2020, they have expanded their distribution channel to e-commerce marketplace platforms such as Shopee and Lazada and OSP delivery to serve the new buying habit of the consumers, which lean towards in-home consumption (Osotspa, 2020b).

In 2018, OSP launched a FIT-FAST-FIRM campaign to defend and maximize their profit by minimizing the cost. This cost saving campaign targets a total saving of THB 2,500 million for 2019 - 2023, approximately THB 500-800 million per year, which has been very effective. In 2020, although there were many challenges from the COVID-19 outbreak, OSP managed the total cost savings of THB 1,100 million, which exceeded the target and the total cost saving of THB 775 million in 2019. This was mainly by optimizing the raw material, packaging material, product formulation, enhancing production efficiency, and reducing cost while enhancing the work process in the new normal by collaborating with the employees. OSP targets to reduce the cost of more than THB 1000 million in 2021 through the FIT-FAST-FIRM campaign in Myanmar, optimizing product formulation of sugar level in all energy drink, usage of

lighter weight bottles for the majority of beverage bottles, and saving transportation costs by optimizing the warehouse and distribution (Osotspa, 2021c).

2.3 Corporate Governance

OSP's management team was led by Mr. Surin Osathanugrah, who has been the board of directors' chairman since 24th February 1982 (**Figure 2.11**).

Name	Position	Start Date	End Date
			LINE DUCK
Mr. SURIN OSATHANUGRAH	CHAIRMAN OF THE BOARD OF DIRECTORS	24/02/1982	
Mrs. KANNIKAR CHALITAPORN	CHAIRPERSON OF THE EXECUTIVE COMMITTEE	22/07/2020	
Irs. KANNIKAR CHALITAPORN	VICE CHAIRPERSON OF BOARD OF DIRECTORS	29/03/2016	
Mr. SOMPRASONG BOONYACHAI	VICE CHAIRMAN OF THE BOARD OF DIRECTORS	29/03/2016	
Mr. PETCH OSATHANUGRAH	VICE CHAIRMAN OF THE BOARD OF DIRECTORS	22/07/2020	
Mr. RATCH OSATHANUGRAH	VICE CHAIRMAN OF THE BOARD OF DIRECTORS	01/11/1994	
Ir. THANA CHAIPRASIT	CEO (ACTING)	22/07/2020	22/07/2021
Mr. THANA CHAIPRASIT	DIRECTOR	18/09/1984	
Ir. PRATHARN CHAIPRASIT	DIRECTOR	11/10/1996	
r. TASHARIN OSATHANUGRAH	DIRECTOR	17/10/2008	
Ir. NITI OSATHANUGRAH	DIRECTOR	01/07/1991	
rs. Wannipa Bhakdibutr	DIRECTOR	13/12/2018	
Irs. PORNTIDA BOONSA	DIRECTOR	17/09/2020	
r.: SOMPRASONG BOONYACHAI	INDEPENDENT DIRECTOR	29/03/2016	
Ir. SALIN PINKAYAN	INDEPENDENT DIRECTOR	27/03/2008	
Niss PENCHUN JARIKASEM	INDEPENDENT DIRECTOR	29/03/2016	
Ir. KRIRK VANIKKUL	INDEPENDENT DIRECTOR	29/03/2016	
rs. SINEE THIENPRASIDDHI	INDEPENDENT DIRECTOR	29/03/2016	
liss PENCHUN JARIKASEM	CHAIRMAN OF THE AUDIT COMMITTEE	27/04/2016	
r. KRIRK VANIKKUL	AUDIT COMMITTEE	27/04/2016	
Irs. SINEE THIENPRASIDDHI	AUDIT COMMITTEE	27/04/2016	

Figure 2.11 Osotspa's management team (Setsmart, 2021a)

The major shareholder is Mr. Niti Osathanugrah, who has the total shares of 715,030,000 (23.80% of total shares) with the position of Director (as of 11th July 2021). The Osathanugrah family has almost 40% of the total company's shares (**Figure 2.12**).

Rank	Major Shareholders	Major Shareholders	% Shares
1	Mr. Niti Osathanugrah	715,030,000	23.80
2	Thai NVDR Company Limited	150,603,602	5.01
3	BANK OF SINGAPORE-ORIZON LIMITED	150,187,500	5.00
4	Mr. Ratch Osathanugrah	111,673,800	3.72
5	Sub. Lt. Seri Osathanugrah	111,511,000	3.71
6	ORIZON LIMITED	110,872,975	3.69
7	Mr. Pasuree Osathanugrah	90,212,800	3.00
8	Ms. Quesara Osathanugrah	83,888,200	2.79
9	Mr. Tasharin Osathanugrah	76,892,500	2.56
10	BANGKOK BANK PUBLIC COMPANY LIMITED	75,000,000	2.50
		Overn	view As of 1/7/2021

Figure 2.12 Osotspa's Major Shareholders (Setsmart, 2021b)

From OSP Annual report 2020 (Osotspa, 2020b), for the objective of long-term sustainable growth, the Board of Directors is committed to operate according to the principle of good corporate governance. Moreover, the company will be fully transparent in order to construct confidence among shareholders, investors and other stakeholders. OSP's objective is to generate firm business performance and benefits according to the guidance of the Securities and Exchange Commission of Thailand (SEC)'s Corporate Governance Code for listed companies 2017. By following the guidance, the organization can upgrade its current business performance to a higher rank. The setup of standard, clear and practical guidelines can promote understanding and develop a positive work culture in the organization as a whole. In the future, the company will become much stronger and sustainably growing by moving towards these objectives. Currently, OSP achieving the CG score of 4 (**Figure 2.13**), which is Very Good level from SET.



Figure 2.13 Corporate Governance (Settrade, 2021)

CHAPTER III

MACRO-ECONOMIC ANALYSIS AND INDUSTRY OUTLOOK

3.1 Macro-economic analysis

The world economy is likely to recover well. This will vary from country to country depending on the speed of COVID-19 vaccination, which leads to emergence of cohort immunity and by issuing measures to support continued economic recovery and economic structures that rely more or less on the foreign tourism sector. Based on the international forecast (IMF, 2021), the world GDP growth is 6% in 2021, and it is projected to grow in 2022 at 4.4%. Thailand's economy is projected at 2.6% in 2021 moderating to 5.6% in 2022, while Myanmar's GDP growth forecast is -8.9% in 2021 and tends to increase 1.4% in 2022.



Figure 3.1 The Global, Thailand and Myanmar's real GDP growth in 2021 and forecasted real GDP growth in 2022 (IMF, 2021)

3.2 Industry outlook

The beverage industry can be divided into 2 categories namely, alcoholic drinks and nonalcoholic drinks. Non-alcoholic drinks mainly consist of energy drinks, sport drinks and functional drinks. They are the fastest growing beverage segments globally and the drink that is normally consumed by adult consumers, to boost their energy hence called, "Energy drinks" (**Figure 3.2**).



Figure 3.2 Beverage categories (Frost & Sullivan, 2018)

Energy drinks are beverages that commonly have caffeine combined with other ingredients that can enhance its performance, such as taurine and herbal extracts, like Gingko Biloba, and Ginseng. The core ingredients added in the energy drinks can boost energy longer compared to sports and functional drinks (Frost & Sullivan, 2018).

Sport drinks are beverages that are formulated with the purpose of helping consumers, that engage in a heavy physical activity prevent dehydration, provide an extended amount of energy to the muscle through carbohydrates and replace the sodium and other electrolyte loss from sweat. A sport drink is consumed before, during or after heavy physical activities (Frost & Sullivan, 2018).

Ready to drink (RTD) coffee is a beverage made for quick caffeine intake, which can assist in concentration and energy-boosting. It is better than the high-quality freshly brewed coffee in terms of convenience (can be consumed instantly) and easy to obtain at a more affordable price (Frost & Sullivan, 2018).

Functional drinks are the beverages that mostly focus on enhancing and rejuvenating the health of the consumers. The drinks contain bio-active compounds from concentrated natural or nutraceutical extracts such as, tea, fruit or herbs, or fortified with vitamins, minerals, and antioxidants (Frost & Sullivan, 2018).

Soft drinks are acidic beverages that are defined as non-alcoholic beverages. The main ingredients consist of water, sweetener, carbon dioxide, flavorings, coloring agents, acidulates, chemical preservatives (within the legal limits), antioxidants, and foaming agents such as saponins (Kregiel, 2015).

Juices are liquid extract from the fruits or vegetables, which contains high amount of nutraceutical compounds that can improve the immune system and provide many health benefits (Rajauria & Tiwari, 2018).

Bottled water is drinking water, such as well water, distilled water, mineral water, or spring water in bottle packaging. It can be either carbonated or non-carbonated and appears in various sizes.

Milk is a beverage derived from mammals, such as cows, and goats. It contains several bioactive components such as β -lactoglobulin, α -lactalbumin, lactoferrin, lactoperoxidase, whey protein hydrolysates, vitamins, and minerals (Mudgil & Barak, 2019).

3.2.1 Competitors analysis

OSP Competitors can be divided into direct and indirect competitors. The direct competitors are beverage companies that sell similar products such as energy drinks and functional drinks, while indirect competitors provide potential substitute products such as tea and soft drinks, which are listed below;

Direct competitors

CBG

CARABAO GROUP Public Company Limited with its subsidiaries namely: Carabao Tawandang Co., Ltd., engages in marketing, producing, and manufacturing Carabao Energy Drink. It manages the distribution channels in Thailand and distributes both food and non-food categories for third parties. The Asia Pacific Glass Co., Ltd. engages in production and sourcing of glass bottles as packaging materials used for the energy drinks and other beverages. The Asia Can Manufacturing Co., Ltd. was established as a joint venture to engage in the production of aluminum cans as packaging materials used for energy drinks and other beverages (Carabao, 2021).

SAPPE

SAPPE Public Company Limited manufactures and distributes health food, beverages, and healthy drink products under the brand Mogu Mogu and SAPPE Beauti drink, which are marketed both domestically and abroad. Their products are divided into 5 main categories under 18 brands; the functional beverage segment, fruit juice drink segment, functional powder segment, RTD segment and the healthy snacks (SAPPE, 2021).

Indirect competitors

OISHI

Oishi Group Public Company Limited and its subsidiaries are beverage and food businesses. They manufacture green tea beverages under the brands Oishi Green Tea, Oishi Gold and Oishi Chakulza Sparkling Green Tea. While the food business is the central kitchen for food production and raw materials sent to restaurants in the Oishi group. They also manufacture sandwich products, gyoza products (Oishi, 2021).

ICHI

The Ichitan Group Public Company Limited produces and distributes ready-to-drink green tea, under the brands ICHITAN green tea, Herbal drink Yen Yen by ICHITAN, Green tea with coconut chewey-cube named ICHITAN Chew Chew and Fruit juices and jellies Bireley's by Ichitan. The Company entered a joint venture agreement with PT Atri Pasifik (AP), a company incorporated in Indonesia to produce and sell Ichitan brand ready-to-drink beverages in Indonesia (Ichitan, 2021).

HTC

The Haad Thip Public Company Limited manufactures soft drinks, a franchise granted by The Coca-Cola Company (U.S.A.), Atlanta, Georgia as an exclusive bottler of Coca-Cola, Fanta, Sprite, and other Coca-Cola's products "Minute Maid" juices, Aquarius and Namthip Drinking Water for the 14 southern provinces of Thailand (Haad Thip, 2021).

3.2.2 Industry size

According to Wanna from Krungsri Research (2019), the beverages in Thailand comprise 90% of the domestic market, in which carbonated drinks, energy

drinks, beer and spirits are the most important market segments and are becoming saturated, while only about 10% is exported to the international market. The beverages can be categorized into 2 main categories namely, alcoholic and nonalcoholic beverages. As shown in **Figure 3.3**, we can see that Thai people consumed non-alcoholic beverages (72%) more than alcoholic beverages (28%). However, the value of alcoholic beverages (65%) are higher than nonalcoholic beverages (34%).

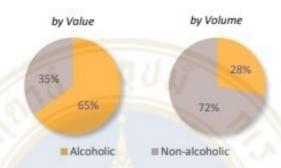


Figure 3.3 Thailand's Beverage Consumption (Wanna, 2019)

The net worth of the domestic market of Thailand's beverages in 2017 was 547 billion baht with the consumption of 7,477 million of drinks. We can see in **Figure 3.4** that alcoholic beverages are worth about 370 billion baht, while non-alcoholic drinks are worth about 200 billion baht. Carbonates & Soda accounted for the highest value of 31.6%, followed by bottled water (22.9%) and sports and energy drinks (19.7%) respectively, while the rest comprised lower percentages.

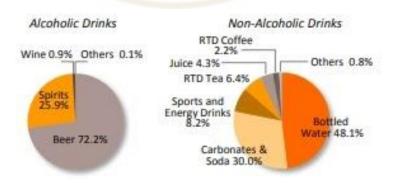


Figure 3.4 Market Share of Thai Beverage by Volume (Wanna, 2019)

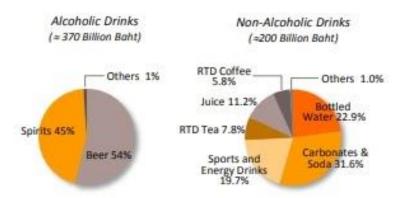


Figure 3.5 Market Share of Thai Beverage by Value (Wanna, 2019)

3.2.3 Energy drinks in Thailand

The total sales value of the energy drinks in Thailand is divided into two categories, off trade sales and on trade sales. On trade is the sales through bars, restaurants, cafes, hotels and established catering. While, off trade refers to the total sales through retail sales such as supermarkets/hypermarket and convenience stores, independent small grocers, forecourt retailers, other grocery retailers, non-grocery retailers, vending, home shopping, internet retailing and direct selling. In 2020, the total sales value of energy drinks was 23.6 billion baht; 92.6% off trade sales and 7.4% on trade sales. As shown in Figure 3.6, the off-trade sales value dropped by 2% in 2016, then continuously increased till 2019 and dropped again by 4.3% in 2020. This was mainly due to the adverse economic situation caused by the COVID -19 pandemic that made a negative impact on Thai people's income leading to the change in spending habits. The blue-collar workers and manual laborers who are the main consumers of energy drinks, got the hardest hit from the pandemic. Thai people have less money and reason to spend on energy drinks, causing the significant drop in demand for energy drinks. Despite the economic uncertainty from COVID-19, in 2020, OSP still maintains its strong leading position in energy drinks with sales value of 47% compared to its main competitor, Carabao Tawandang with sales value of 28%.

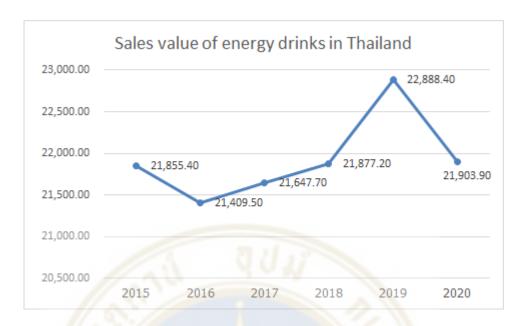


Figure 3.6 Off trade sales value of energy drinks in Thailand (Euromonitor, 2021)

3.2.4 Demand drivers

There are 3 main drivers for the consumption of energy drinks, blue collar workers, migrant workers, and white-collar workers.

Blue collar worker: According to Frost & Sullivan (2018), blue collar workers contributed to the 92.2% of energy drinks sales in Thailand in Q2 2018. The infrastructure development of the Transport Action Plan in 2017 promoted urbanization, which increased the jobs for blue collar workers; who are the major consumers of energy drinks. Combined with the changes in "Minimum Wage Rate" in January 2017, it helped increased the number of collar workers with higher affordability, which then helped drive the increase in the demand for energy drinks. Thus, helped expand the consumer base and increase the sales of OSP.

Migrant Workers: Thailand has been the migrant hub for both incoming and transiting migrants in Southeast Asia. The migrant workers have a higher tendency to work longer than Thai workers. They have the demand for energy drinks in order to boost themselves to work longer hours. Thailand has been attracting foreign low-wage workers since the 1990s and it is expected to continue to do so, leading to the expansion of the energy drinks consumers base (Frost & Sullivan, 2018).

White Collar Workers: The growing urbanization has expanded the white-collar employment sector, which also increased the annual salary of the white-collar workers in various position levels. Moreover, the changing lifestyle of the target consumers for energy drinks has widened to women consumers, traditionally men consumers. There is an increasing trend of women entering the white-collar employment. There is also an increasing trend of longer working hours for white collar workers in some particular occupations such as legislators, managers, and professionals, which increases the likelihood of drinking of energy drinks. Therefore, energy drink consumption and consumer base can grow by targeting the increasing in numbers of white-collar workers consumers, especially the female white-collar segment. (Frost & Sullivan, 2018).

CHAPTER IV VALUATION

4.1 Discounted Cash Flow Valuation

The DCF formula is to determine the value of a business. It represents the value an investor would be willing to pay for an investment, given a required rate of return on their investment. The Enterprise Value of the business is calculated using the function along with the discount rate and the Free Cash Flow to the Firm in each of the forecast periods, plus the terminal value.

4.1.1 Sales forecast

As reported in FY2020 MD&A by OSP on 24th February 2021, it has been reported that got affected by the COVID-19 situation, as a result, the revenue growth rate from the sales of the beverage products was about 0.3% YoY (Osotspa, 2021b). It can be seen that energy drinks sales have decreased from 2019-2020, but on the other hand, the epidemic of COVID-19 has also driven consumers' realization of the importance of health and wellness, hence, the demand for health and wellness-related products increased. This resulted in the outstanding growth of the C-vitt beverage products. Functional Drinks have a higher sales growth rate in 2020. As a result, the total revenue of the beverages segment was not affected much. The growth of the Functional Drinks market was about 9.0% YoY. The beverage segment growth trend slowed down in the last quarter of the year due to contraction in purchasing power and consumption, despite the continuation of government stimulus measures. There was also a shift in purchasing channels from traditional trade to e-commerce. The company has adjusted its sales and distribution strategy, resulting in a turnaround performance in the fourth quarter (Osotspa, 2020b). Sales of the Functional Drinks segment are expected to grow at a rate of 0.91% during the years 2022 to 2025.

Table 4.1 Osotspa's sales revenue forecast

OSOTSPA TOTAL SALE REVENUES	2559	2560	2561	2562	2563					
Unit (Million Baht)	2016	2017	2018	2019	2020	2021F	2022F	2023F	2024F	2025F
TOTAL SALE REVENUES	33,003.68	26,210.66	24,970.88	26,186.69	26,129.08	26,594.91	27,547.76	28,624.92	29,845.39	31,231.11
BEVERAGE	19,624.50	18,975.40	20,359.00	21,473.00	21,547.00	22,561.85	23,514.70	24,591.86	25,812.33	27,198.05
ENERGY DRINK, SPORT DRINK, AND RTD	19,196.90	18,639.10	18,336.00	18,853.00	17,706.00	17,417.01	17,574.75	17,733.91	17,894.52	18,056.59
FUNCTIONAL DRINK	1,487.80	1,609.10	2,023.00	2,620.00	3,841.00	5,144.84	5,939.95	6,857.94	7,917.81	9,141.46
PERSONAL CARE	3,072.10	2,195.40	2,452.00	2,656.00	2,501.00	2,532.06	2,532.06	2,532.06	2,532.06	2,532.06
OTHERS	7,595.50	2,583.20	1,486.00	1,482.00	1,535.00	1,501.00	1,501.00	1,501.00	1,501.00	1,501.00
TOTAL REVENUE	33,003.68	26,210.66	24,970.88	26,186.69	26,129.08	26,594.91	27,547.76	28,624.92	29,845.39	31,231.11

OSP's revenue was broken down into four categories to forecast growth in each segment over the next five years. Based on the forecast, the energy drink segment is expected to fall about 1.63% YoY in 2021. Due to the COVID-19 epidemic, the forecast of 2021 growth was from the average growth 2019-2020 because of the ongoing COVID-19 epidemic situation. The projected sales growth rate between 2022-2025 was 0.91% per year, calculated from the average sales growth rate in 2016-2019. For functional Drinks segment in 2021, the growth rate is 33.95% per year, projected from the average growth rate in 2019-2020. The rate of sales growth between 2022 and 2025 is an increase of 15.45% per year. Personal care segment forecasts will be stable sales over the next 5 years based on the average sales of 2 years (2019-2020). As for the other groups, it is expected that the sales value will remain stable in the next 5 years by averaging sales value for 3 years in (2018-2020). The CAGR of total revenue of all sales for OSP over the next 5 years (2021-2025) is 4.1%.

4.1.2 Free Cash Flow to The Firm

Table 4.2 Osotspa's Free Cash Flow to The Firm Forecast

PERIOD		1	2	3	4	5	Terminal Value
Unit (Million Baht)	2020	2021F	2022F	2023F	2024F	2025F	
EBIT	3,864.59	4,989.24	5,132.16	5,293.74	5,476.81	5,684.67	
TAX	-587.37	-997.85	-1,026.43	-1,058.75	-1,095.36	-1,136.93	
EBIT AFTER TAX	3,277.22	3,991.39	4,105.73	4,234.99	4,381.45	4,547.73	
DEPRECIATION	1,284.57	1,395.81	1,568.61	1,755.23	1,956.78	2,174.46	
WORKING CAPITAL CHANGE	-1,165.87	350.95	-40.73	-46.04	-52.16	-59.23	
CAPEX	-3,350.50	-1,600.00	-1,728.00	-1,866.24	-2,015.54	-2,176.78	
CASHFLOW TO THE FIRM	45.41	4,138.15	3,905.61	4,077.94	4,270.53	4,486.19	145,021.77
DISCOUNTED CASHFLOW		3,855.92	3,391.04	3,299.18	3,219.35	3,151.27	101,868.89

EBIT after Tax

Forecasting costs of goods account for 65% of the total revenue is based on historical trends over the past 3 years, and the SG&A expanses are accounted for 20% of the total revenue based on the average cost of the past 3 years. In addition, OSP has set goals to reduce production costs and increase productivity in the long run through the continuous Fit Fast Firm project. It is expected that operating expenses will be reduced by 1000 million baht over the next 5 years and the corporate income tax rate of OSP is expected to be 20% according to the information obtained. That said, the normal Thai corporate income tax rate is 20% of the income from doing business in Thailand (BOI, 2021).

Change in Working Capital

The changes in working capital are reflected in the company's cash flow statement. The business depends on working capital management in terms of inventory, trade accounts receivable. and trade accounts payable based on these variables, we project a constant value over the next 5 years based on the company's past operations.

CAPEX

Capital expenditures determine the growth of fixed assets. As the company made large investments in 2018-2019, its capital expenditure projections are based on the average historical CAPEX change over 3 years (2016 - 2018), so the growth rate is approximately 8% per year.

Depreciation

Depreciation in the next 5 years is determined by fixed assets. Estimated from the proportion of assets in the past about 10% of fixed assets.

4.2.3 Terminal Growth Rate

The OSP terminal growth rate results is approximately 4.1%, taking the projected growth rates based on the total revenue growth rates of 2021-2025. It was supported by its position as a market leader in consumer products. There is also a higher gross profit margin from the establishment of a new factory and help promote the rate of growth to increase more. Based on the very basic assumptions from stable the product sales it still has the number one market share in all major product groups.

4.1.4 WACC Calculation

Based on the results of the calculation of the investment structure, OSP has a WACC of approximately 7.32% obtained by weighting between the cost of borrowing money, and cost of money received from shareholders

Table 4.3 WACC Components

WACC		6.01	
RISK FREE	1.75% ThaiBMA	TERMINAL GROWTH	4.1%
EQUITY RISK PREMIUM	7.06% Damodaran		
BETA	0.78 Setsmart		
RQD. RETURN ON EQUITY	7.26%	As of 2nd July 2021	
		Share price	37.75
COST OF DEBT	5.41%	Number of shares (Mn)	3,004
AFTER TAX COST OF DEBT	4.3%	Equity Value (BtMn)	113,392
Tax	20%	NET DEBT / (EQUITY + NET DEBT)	-1.98%
WACC	7.32%		

Cost of Equity

The cost of equity is the rate of return that the shareholder wants. It can be calculated by using Capital Asset Pricing (CAPM) Model. This model examines the relationship between systematic risk and expected return for assets, especially stocks. The cost of equity can be calculated using CAPM, using a risk-free rate of 1.75% over a 10-year yield on government Treasury bills (ThaiBMA, 2021) and as an estimate of the risk-free rate due to the low probability of default.

Beta measures how a company's stock price reacts to the overall market. The beta of OSP is 0.78 (Setsmart, 2021c), indicating that the share price has less volatility. It will change in the same way as the market but moves less than the market.

Equity risk premium is the difference between total stock market return and risk-free return, by using Equity risk premium with Country Risk Premium of Thailand, at 7.06% (Damodaran, July 2021).

Cost of Debt

Cost of debt is the interest rate of a company pays to its creditors. The cost of debt can be determined, using the cost of debt by financial costs and interest-bearing debt data with a tax rate of 20%. So, the cost of debt of OSP is calculated to be 5.41%.

4.1.5 Valuation Results

The present value of firm is 118,961 million baht plus by cash and deduct debt, it will make the equity value of the firm 121,158 million baht and divide by the number of shares 3,004 million shares.

Table 4.4 Estimation of share value

ESTIMATION OF SHARE VALUE	2021	2022
PV OF FIRM VALUE	118,785.64	
PLUS CASH	2,530.56	
LESS DEBT	333.56	
PV OF EQUITY VALUE	120,982.64	
No. OF SHARES	3,003.75	
EST. SHARE VALUE	40.28	
EST. SHARE VALUE		43.20
Current share price as of 2nd July 2021 = 37	7.75	

The estimated share value at year ended 2021 is 40.28 baht is higher compare to the share price on July 2, 2021, the current market is 37.75 baht. This estimate shows that the current market price of OSP was slightly undervalued. The estimated share value at the end of 2022 is 43.20 baht per share, compute by using the require rate of return on equity 7.26% as a return that the shareholder wants multiplied the estimated share value on 2021. When compared estimated share price FY2022 with the current price (37.75 baht), it also shows that the current market price is undervalued.

Rating Criteria

Investment recommendations are categorized into three categories; buy, hold and sell. It will be recommended to "BUY" if the target price is 10% greater than the current price. Then recommended to "HOLD", if the target price and the current price has different between +/-10%. And recommended to "SELL". if the target price is 10% downside from the current price.

Table 4.5 Recommendation criteria

Criteria	Recommendation
Greater than 10% upside	BUY
Within the range of +/- 10%	HOLD
Lower than 10% downside	SELL

From the target price of OSP is at 40.28 baht, which is higher than the current share price as of 2 July 2021 = 37.75 baht to 6.69% upside in Level +/-10%. Therefore, according to investment advice, OSP is among those that should be "HOLD".

4.2 Sensitivity Analysis

From the sensitivity analysis information that shows the change in the target stock price, assign variable margins to 0.22 increments considering two variables that affect stock prices; WACC and the terminal growth.

Table 4.6 Sensitivity Analysis

	Base	WACC								
TERMINAL GROWTH	40.28	6.44%	6.66%	6.88%	7.10%	7.32%	7.54%	7.76%	7.98%	8.20%
	3.44%	44.05	41.12	38.56	36.32	34.33	32.56	30.97	29.54	28.25
	3.66%	47.12	43.75	40.83	38.30	36.07	34.10	32.35	30.78	29.36
	3.88%	50.72	46.79	43.44	40.55	38.04	35.83	33.88	32.14	30.58
	4.10%	54.99	50.36	46.46	43.14	40.28	37.79	35.60	33.66	31.93
	4.32%	60.15	54.59	50.00	46.13	42.84	40.00	37.53	35.36	33.44
	4.54%	66.50	59.71	54.20	49.64	45.81	42.55	39.73	37.28	35.13
	4.76%	74.52	66.01	59.27	53.81	49.29	45.49	42.25	39.46	37.03
	4.98%	84.95	73.96	65.52	58.84	53.42	48.94	45.17	41.96	39.20
	5.20%	99.09	84.31	73.41	65.04	58.42	53.04	48.60	44.86	41.68

The table shows the effect on the target price. It can be seen that the terminal growth rate should not be lower than 3.88% and WACC should not be higher than 7.54% as it will cause the share price to be lower than the current market price, priced at 37.75 baht.

CHAPTER V INVESTMENT RISKS AND DOWNSIDE POSSIBILITIES

Impact Risk Matrix Medium High Low High Likelihood Regulatory and tax New and foreign changes Product quality and Medium Volatility of raw currency risk material prices Global Pandemic Low

Table 5.1 Risk Assessment Matrix (Own analysis)

5.1 Strategic risk

5.1.1 Consumer trends and preferences

Nowadays, consumers are more concerned about their long-term health. Healthy food and drink have been on a high rise during the past few years. One of the most popular trends is the avoidance of high sugar content drinks, which shifted the preference of the consumers towards healthier drinks, such as unsweetened milk, juice, tea and mineral water. This has a huge impact in the beverage industry to lower the sugar content or use the sugar substitute such as stevia. Recently, the impact of Covid-19 pandemic also boosted the preference of the consumers towards functional drinks as the alternative way for additional vitamin intake to strengthen the immune system. OSP benefits from the increasing demand in functional drinks, which C-Vitt's market share increased by 9.1% YoY; total market share of 31.0% in the functional drink market in 2020. However, trends and preferences of the consumers are changing continuously. Therefore, the failure in evolving their portfolio to take advantage of growth categories,

competitive landscape, or to shape/participate in critical consumer, customer, or competitor developments may lead to consumers seeking for the alternative products, the business model is less efficient than the key competitors and the decrease in the revenue and market share. Therefore, the beverage companies must be able to adapt to the current trends and offer the products that meet up to the preferences of the consumers.

5.1.2 New and foreign investment and currency risk

Currently, 14% of OSP's revenue comes from international sales, in which the main international revenue and investment are in Myanmar. As the company is moving towards a growth strategy, they are always seeking opportunities to expand internationally and diversely as well as into new markets. However, growing their business into the foreign market and new market is not an easy task because the strategic aims may not fit or appropriate to apply to the target countries that OSP want to invest and the lack of knowledge and brand presence in the new market may lead to the failure in growing their business into the international and new market.

Moreover, there is currency risk from the fluctuation in exchange rate. Apart from the domestic sales, OSP also sells its energy drinks to the international market, especially in the CLMV markets. The fluctuation in the foreign exchange rate may negatively affect the revenues and operating costs, which will impact the financial position and the results of operations of the company.

5.2 Operational Risk

5.2.1 Product quality and safety

The quality and safety of the products are very important to the company. The products' quality must meet with the quality standard and requirement and ensure that it is safe to consume. The risk of raw material or finished product contamination or unsafe counterfeit products being supplied to the market are possible. These will not only harm the consumers but also lead to additional cost incurred from the consumers' complaint and claim. And in the worst case, the corporate image and brand reputation

will be damaged, which leads to loss of customers and revenue. In addition, it is very hard to gain the trust of the customers back when this kind of incident happens and the company may need to take a very long time to recover.

5.2.2 Volatility of raw material prices

Many factors such as global supply and demand, government incentives and controls, taxes and tariffs, and overall economic conditions can increase the price of commodities, including sugar, cullet, and natural gas, which impact the supply chain. As the cost of raw material increases, OSP's operating margin will decrease.

5.3.2 Regulatory and tax changes

Regulatory and tax such as value-added tax, excise tax, tariff and corporate tax can affect OSP's cost as every company is subject to their countries the regulations and tax policies. As Thai government promotes the consumption of healthier beverages, the sugar tax was increased in 2019 to encourage less consumption of sugar and create the corporation of the private sector to lower their sugar content, providing a higher variety of healthier drinks. The increase in tax could have a negative impact on the cost of their beverage products and fluctuation on revenue. Moreover, the inability to realize the tax benefits may also make OSP lose the opportunity to lower their tax and have to pay higher than they should.

5.5 Emerging Risk

5.5.1 Global Pandemic

The coronavirus pandemic outbreak has a negative impact in almost all industries globally. Person-to-person contact and travelling activities were strictly restricted. There are also many problems in manufacturing, quality control, acquiring raw materials and supplies and distributing the goods in relation to the government control measures and limited resources at the company or supplier. Moreover, the COVID-19 negatively impacted on employment and purchasing power of the consumers. People are more careful in spending and the ability to purchase goods tends

to get lower in this difficult time. Moreover, as the global economy is in a downturn, thus, it is risky to expand the business.



CHAPTER VI CONCLUSION

The Osotspa Public Company Limited (OSP) is a company based in Thailand. It focuses on manufacturing and distributing non-alcoholic beverages and personal care products. The objective of this thematic paper is to give financial analysis and valuation of Osotspa Public Company Limited, which outlines the company's financial performance, the discounted cash flow (DCF) model and assumptions to provide a valuation of the company. The summary of the potential qualitative and quantitative risks are shown to point out additional possibilities which can affect the valuation. An overview of the company and macroeconomic analysis is also provided to show how OSP operates and what influences the company's potential growth.

The use of the discounted cash flow (DCF) approach was chosen for the valuation of this stock which focuses on asset valuation, by forecasting future cash flows and discounted back to its current value using a rate of return that is appropriate for the asset. The valuation will forecast cash flows in the span of 5 years (2021-2025) when valuing the cash flow of the company. The Cost of Equivalent Capital interest expected by shareholders that includes dividends or gains on stock margin or the desired rate of return for shareholders is 7.26%. The OSP's cost of capitalization is 5.41%, calculated at 7.32% when the obtained value is calculated by the DCF method. It will have a target share price at 40.28 baht that is 6.69% higher than the current market price as of 2 July 2021 of 37.75 baht, in addition to using the discounted cash flow method and studying the differences of each variable and forecasting the revenue growth of each product group. Operating profit margin profit growth investment used the company tax rate including the impact that affects the trend of operations and sales of the company. It has the advantage of being able to directly find the value of a company that is specific to each company. From the valuation results, the target share price lies between +/-10% from the current stock market price. Therefore, I would suggest that it should be rated as "HOLD".

The limitations of DCF valuation, requires a detailed information that can accurately forecast future. It is a method suitable for businesses with high stability and low risk profits are consistent. In terms of terminal growth and discount rate, it is highly sensitive to business value which reduces the future cash flows to the present value. Therefore, it is difficult to estimate free cash flow. Moreover, business valuation is an analytical process that involves forecasting future events for which no other computational method has been proven to predict the future as accurately as possible, so when doing a valuation of a business, more than one estimation method is used to ensure that the valuation of the business has been thoroughly analyzed and moderated. This will be used as the basis for further joint venture negotiations.



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Appendix A: Five Force analysis

OSP-Five Force analysis

Low threat of new entrants:

It is difficult for new players to enter due to the high initial capital investment required for creating brand buying machines, facilities, distribution channels etc. OSP is well-known in Thailand and internationally, and has high brand loyalty from customers, with the leading position at 54.5% market share of energy drinks in Thailand in 2020. In addition, OSP has various distribution channels such as, traditional trade, modern convenience stores, vending machines and expanded into e-commerce in 2020.

Medium threat of substitutes:

There are risks in the changing trends and preferences of the customers. Although OSP has the highest market share in energy drinks in Thailand, customers may be attracted or consider consuming energy drinks from its competitors for example, CBG or buy other alternative products like tea, and milk.

Low bargaining power of suppliers:

Most of the inputs related to the beverage businesses are managed by OSP, for example; OSP has their own outlets, glass factories and beverage filling factories. They also have several distributors in many countries around the world.

Medium bargaining power of customers:

There are few energy drinks and functional drinks suppliers in the market where prices of the drinks are relatively similar to each other, resulting in customers shifting to drinks with lower prices. Therefore, the bargaining power of customers is considered as medium.

Medium competitive rivalry:

There are several new players (indirect competitors) in the beverage industry in Thailand, mainly in health and beauty related drinks such as, and vitamin water.

Appendix B: SWOT analysis

Internal Factor

STRENGTH

- The company has a strong image and is widely known to consumers.
- Its capital is higher than the competitors so there is less financial cost for expanding.
- They provide a wide variety of products as the main contribution to the total revenue.
- It has the leading market share in Thailand.
- The company has strong customer loyalty.
- They have many distribution channels.

WEAKNESSES

- There are some environmental concerns.
- Concerns that the products are unhealthy.
- There is new and lower market share compared to competitors (CBG and Red Bull) in overseas markets

External Factor

OPPORTUNITIES

- The advancement of technology makes advertising easier for the company.
- The use of new technology AI & Analytics enables the company to reduce operation cost and cost leadership strategy.
- There is wider expansion for retail stores.

THREATS

- The disruption from the coronavirus (Covid19) epidemic.
- The recession in Thai economy.
- The high competition in the beverage market and the increasing new brands of beverages launched in Thailand.
- The reduction of the demand for carbonated drinks due to the growing health-consciousness of consumers.
- Natural disasters.
- The increasing prices of raw materials.